Chapter 9

Damages and Attorney Fees

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§ 9:1 Statutory Basis
§ 9:1.1 Damages on U.S. Sales of Components Used Overseas in a Process Patented in the United States
§ 9:1.2 Damages Base and Exclusions

§ 9:2 Determination of Liability Period
§ 9:2.1 Start and End of Patent Term
§ 9:2.2 Start and End of Infringement
§ 9:2.3 Six-Year Pre-Complaint Limitation
§ 9:2.4 Limitations Imposed by the Patent Marking Statute

§ 9:3 Tests for Entitlement to a Lost Profit Measure of Damages
§ 9:3.1 Requirement for Causation Generally
§ 9:3.2 Panduit Test for Lost Profits
   [A] Demand for Patented Product
   [B] Absence of Acceptable Noninfringing Substitute
   [C] Capacity
   [D] Quantum of Lost Profits
§ 9:3.3 Alternatives to Panduit Test
§ 9:3.4 Lost Profits or Infringers' Profits on a Design Patent

§ 9:4 Calculation of Amount of Lost Profits
§ 9:4.1 Profits on the Patented Product Lost to the Infringing Products
§ 9:4.2 Profits on Unpatented Products Sold by the Patentee Lost to Infringing Products
§ 9:4.3 Profits on Ancillary Products Meeting the Entire Market Value Test
§ 9:4.4 Profits Lost Due to Price Erosion Damages

§ 9:5 Reasonable-Royalty Measure of Recovery

§ 9:5.1 Reasonable Royalty Based on Hypothetical Pre-Infringement Negotiations

§ 9:5.2 Reasonable Royalty Based on a Fraction of the Patentee’s Lost Profits

§ 9:5.3 Reasonable Royalty Based on a Fraction of Infringer’s Anticipated Profit

§ 9:5.4 Reasonable Royalty Limited by the Differential Cost of Using an Alternative Noninfringing Technology

§ 9:5.5 Reasonable Royalty Based on a Flat Fee or Milestone Payments

§ 9:5.6 Georgia-Pacific Factors

§ 9:5.7 Blended Damages Award of Lost Profits and Reasonable Royalty Based on Market Share

§ 9:5.8 Liquidated Damages Award Against Violating Licensee

§ 9:5.9 Compelled Royalty for a Winning Patentee After Denial of a Permanent Injunction

§ 9:5.10 Reasonable Royalty, Entire Market Value, and Surveys

§ 9:6 Proving the Amount of Damages

§ 9:6.1 Foundational Fact Evidence of Damages

[A] Sales and Marketing Fact Witnesses

[B] Adverse Witnesses Employed by the Infringer

[C] Licensing Witnesses

[D] Capacity Witnesses

§ 9:6.2 Use of a Damages Expert

[A] Selection of a Damages Expert

[B] Expert’s Team

[C] Protection of Attorney Work Product

[D] Procedural Issues re Damages Evidence

§ 9:6.3 Damages for Post-Verdict Sales

§ 9:7 Effect of Bifurcation on Trial of Damages

§ 9:8 Demonstrative Exhibits

§ 9:9 Prejudgment Interest

§ 9:10 Increased Damages

§ 9:10.1 Willfulness and Who Determines It

§ 9:10.2 Willfulness = Objective Recklessness

§ 9:10.3 Judicial Discretion on Enhancement

§ 9:10.4 Privilege and Disqualification

§ 9:10.5 Requirements for Opinion Adequacy

[A] Competence and Comprehensiveness

[B] Timeliness

§ 9:11 Award of Attorney Fees

§ 9:12 False Marking

§ 9:12.1 Under 1952 Act

§ 9:12.2 Under 2011 Act
§ 9:1 Statutory Basis

The patent damages statute, 35 U.S.C. § 284, provides that a prevailing patent claimant shall recover “damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use of the invention made by the infringer, together with interest and costs as fixed by the court.”

Determination of patent damages commences with identifying the term for which the infringer is liable. Identification of the damages period is affected by several variables including the duration of the infringement, the duration of the period of validity of the patent, patent notice and marking requirements, and a statutory six-year limitation.

The damages themselves may be computed on either a “lost profits” or a “reasonable royalty” basis and there is frequently a contest for which measure should be applied. When lost profits is the measure, the quantum of damages is not restricted to profits lost on the sales taken by the infringer, but can extend to the damages caused by erosion of the patent owner’s prices, and other factors. If a reasonable royalty measure is applied, the determination of royalty rate involves a multi-factor analysis in which different factors may assume varying weights. In appropriate cases, there can be a mixed award: lost profits may be awarded on that portion of the infringer’s sales for which a lost profits basis is established, with a reasonable royalty measure being applied to the remainder of the infringer’s sales. After patent damages have been determined, the patent owner is entitled to prejudgment interest, as well as its costs.

In “exceptional” cases, the patent statute provides for enhancement of damages up to three times the amount found at the discretion of the court. Also, in exceptional cases, the prevailing party, which may include the successful defendant, may be awarded its reasonable attorneys’ fees under 35 U.S.C. § 285, again at the court’s discretion.

§ 9:1.1 Damages on U.S. Sales of Components Used Overseas in a Process Patented in the United States

Section 271(f) of title 35 of the U.S. Code makes it infringement of a U.S. patent to supply in or from the United States any component of a patented invention that is specifically for use in the invention and not a staple item having substantial noninfringing use, knowing that it will be combined outside the United States in a manner that would infringe the patent if done in the United States. Damages can be recovered for infringements coming under this section.¹

In 1995, in *AT&T Corp. v. Microsoft Corp.*, the Federal Circuit held that goods made and sold abroad, which incorporated software installed by the use of discs replicated abroad from master discs supplied from the United States that contained an infringing subroutine, could properly be included in the base of sales for damage computation under 35 U.S.C. § 271(f). In 2006, the U.S. Supreme Court granted certiorari and, at the time of writing this supplement, the matter was briefed and awaiting oral argument.

§ 9:1.2 Damages Base and Exclusions

The amount of infringing sales made by the infringer in the applicable damage period is often referred to as the damages base. Where only direct infringement under 35 U.S.C. § 271(a) is relied on, the determination of damages base is a relatively straightforward matter for discovery. Where all or part of the sought-for damages relies on inducement of infringement or contributory infringement under section 271(b) or (c), respectively, determination of the damages base can have special limitations.

The problems of inducement of infringement by a U.S.-based manufacturer for assembly into an infringing product overseas have already been addressed in section 9:1.1. Issues can also arise in an inducement or contributory infringement context in activity wholly within the United States. For example, in a case in which damages were assessed to include sales of a component of a patented combination which the defendant had shipped to distributors who would sell them to users who would assemble the components into the infringing combination, a quantity of components returned by the distributors to the defendant had to be excluded from the damages base. The reason was that, for induced or contributory infringement, there has to be an act of direct infringement; such an act never occurred as to the returns, because they were never assembled into the infringing combinations.

The Federal Circuit has been concerned not to permit double recovery of damages. In a case where the defendant’s inflatable air mattresses found to infringe were sold under the plaintiff’s trademark ONE TOUCH, the plaintiff was limited to its patent damages award and denied an additional award for trademark infringement damages.

Where a winning patent plaintiff has accepted a remittitur of damages for damages on sales of the infringing products to the infringer’s customer, it was not permitted to obtain damages from the customers of

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2. AT&T Corp. v. Microsoft Corp., 414 F.3d 1366 [Fed. Cir. 2005].
the infringer’s customer for compensation for the benefits that they received from their use of the patented item, since the plaintiff had in effect licensed them by accepting the remittitur.\textsuperscript{5}

\section*{§ 9:2 Determination of Liability Period}

\subsection*{§ 9:2.1 Start and End of Patent Term}

The ownership of a pending patent application confers no right to damages prior to the issuance of the patent. Specifically, the damages section provides damages only for infringement, which cannot occur until the patent has been issued.

Liability for damages normally concludes when the defendant terminates its infringement or when the patent claim infringed has either expired at the conclusion of the patent term or been held invalid by a court of final jurisdiction. While this rule seems simple, there is some case law based on “accelerated reentry” which suggests that lost profits can include some recovery for loss of profits for some period after the expiration of the patent in order to compensate the patentee for the loss of profit after the expiration period caused by accelerated reentry. The theory of accelerated reentry is that the infringer, because it infringed during the term of the patent and built market share, can reenter the market at a higher level when the patent expires than would otherwise have been the case but for the infringement and can, therefore, take a high level of profit from the patent owner in the post-expiration period as a direct result of the infringement before the patent expired.\textsuperscript{6}

\subsection*{§ 9:2.2 Start and End of Infringement}

In general, there cannot be liability for patent infringement damages before the acts of infringement have commenced. There is, however, at least one precedent, not a patent case, which permitted the owner of a mask work to recover damages due to cutting its prices and losing its profits in anticipation of an infringing product’s release before sale of the infringing product had occurred.\textsuperscript{7} In that case, for damages under the Chip Protection Act,\textsuperscript{8} the defendant had publicly

\begin{itemize}
  \item \textsuperscript{5} Glenayre Elecs., Inc. v. Jackson, 443 F.3d 851, 866, 78 U.S.P.Q.2d 1641 [Fed. Cir. 2006].
  
  
  
  \item \textsuperscript{8} 17 U.S.C. § 911[b].
\end{itemize}
announced in April 1988 its intent to introduce its infringing chips at a lower price than the plaintiff although commercial sales did not begin until August 1988.\textsuperscript{9} Referring to patent precedent for guidance,\textsuperscript{10} the Federal Circuit affirmed the jury’s use of the plaintiff’s price reductions caused by the announced marketing of the chips at issue as a basis for damages.

In general, the liability of the infringer ends when it ceases to make, use, or sell the patented invention. However, an issue of concern to sellers of accused infringing products arises when the product is sold to customers before the issuance of the patent and the customers continue to use the product after the patent is issued. In that case, the customers are engaged in infringement after the patent issues by using the patented invention during the term of the patent, notwithstanding the purchase of the device before the patent issued.\textsuperscript{11} This situation can present problems for the manufacturer of the now-infringing device, who may be called upon by the customers for indemnification and defense, even though the manufacturer is not directly liable itself as an inducer or contributor to infringement since the sales occurred before the patent issued.

However, if a machine is sold under conditions which are not infringing, or under which the putative infringer is not liable for damages, then the subsequent servicing or repair is either noninfringing or a nonrecoverable act of infringement.\textsuperscript{12} In Fonar, an infringer who was not liable for damages for the plaintiff’s failure to mark, was found not to have induced infringement by its subsequent repair of items after notification of infringement. “If a machine was sold under circumstances that did not subject its seller to damages, then subsequent repair cannot subject it to damages.”\textsuperscript{13} If there is no direct infringement, there is no inducement of infringement through service and repair.\textsuperscript{14} Where damages have been paid to the patent owner for infringing products, sales of unpatented repair parts for those products do not constitute new acts of infringement.\textsuperscript{15}

Where a patent owner won at trial and was awarded damages for past infringement up to the end of trial, but thereafter infringement continued until the entry of a permanent injunction about seventeen

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\textsuperscript{9} 977 F.2d at 1577.
\textsuperscript{10} Id. at 1579.
\textsuperscript{11} Coakwell v. United States, 372 F.2d 508, 511, 153 U.S.P.Q. 307, 309 (Ct. Cl. 1967) (holding that the fact that certain articles embodying an invention were manufactured and obtained by the defendant before the patent was issued does not authorize their use thereafter).
\textsuperscript{13} Id.
\textsuperscript{14} Id.
\textsuperscript{15} King Instrument Corp. v. Otari Corp., 814 F.2d 1560, 1564, 2 U.S.P.Q.2d 1201 (Fed. Cir. 1987).
months after the trial, the patentee should be permitted to present
evidence to support an award of its post-verdict damages.\footnote{16}

\section*{\textbf{§ 9:2.3 \hspace{1em} Six-Year Pre-Complaint Limitation}}

The patent statute also sets a six-year limitation on recovery of
damages pre-complaint, although it does not limit damages after the
filing of the complaint. Specifically, 35 U.S.C. § 286 provides that
“no recovery shall be had for any infringement committed more than
six years prior to the filing of the Complaint or Counterclaim for
infringement of the action.”

\section*{\textbf{§ 9:2.4 \hspace{1em} Limitations Imposed by the Patent Marking
Statute}}

As a further time limitation on damages, 35 U.S.C. § 287 requires
patentees and their assignees and licensees to mark any products made
under the patent either by marking them with the word “patent” or
“pat.,” together with the patent number. In the event of failure to so
mark, no damages shall be recovered by the patentee in any action for
infringement prior to the date on which actual notice of the infringe-
ment was given to the infringer. The purpose of this statute is to give
an incentive to the makers of patented products to give warning to the
public that the products are protected by a patent.

The notice provided by marking the product with the patent
number is called “constructive notice.” The constructive notice pro-
vided by the patentee’s marking of the patented product with the
patent number does not have to be 100% perfect to be effective; minor
incidents of nonmarking may not be fatal to notice.\footnote{17} While it is
common to plead marking, where the marking has been done, failure
to plead marking in the complaint is not necessarily fatal where other
facts are pleaded alleging the infringer’s knowledge of the patent
during the infringement period.\footnote{18}

Actual notice can be oral as well as written. It must amount to a
definite charge of infringement and not merely the provision of facts
from which the infringer could make the deduction that he was
infringing. In one case, the court found the requisite notice from an
admission of notice by the infringer to the patent owner.\footnote{19} In that case,

\begin{footnotes}
\end{footnotes}
the court made it clear that the infringer’s conclusions or suspicion of infringement independent of any communication from the patent owner would be insufficient.  

In general, when there has been no patent marking, the information provided by the patent owner to be adequate to satisfy the notice required by the statute to trigger damages liability must include

1. the number of the patent,
2. identification of the accused product or process, and
3. an explicit assertion that the accused device or process is infringing the identified patent.

Actual notice is not provided merely by advising the infringer that the patent owner possesses patents on unspecified or unrelated products. If there has been no earlier giving of actual notice, the filing of a patent lawsuit constitutes actual notice of infringement as of the date the complaint was served.

There are two important exceptions to the marking requirement. The first is that the marking requirement does not apply to process inventions. The second exception is where the patentee does not itself make, use, or sell devices coming under the patent and does not have a licensee who does so either.

§ 9:3 Tests for Entitlement to a Lost Profit Measure of Damages

§ 9:3.1 Requirement for Causation Generally

The damages statute provides that a prevailing claimant shall be awarded “damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the

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20. Id. at 567.

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invention by the infringer. . . .”25 Thus, the “reasonable royalty” damages basis is not an exclusive remedy but only a floor for cases in which the patent owner cannot establish a higher measure of damages “adequate to compensate for the infringement.” The alternative to reasonable royalty usually sought by a patent owner will be its lost profits, since most manufacturing companies make a higher incremental profit margin than the level of royalty for which inventions are customarily licensed, based as a percent of gross sales price. However, the right to a lost profits measure of recovery is conditioned upon showing causation, sometimes called a “but for” relationship, between the loss of profits claimed by the patent owner and the acts of infringement.

The requirement for causation has been explained by the Federal Circuit in Rite-Hite, as follows:


The question to be asked in determining damages is “how much had the Patent Holder and Licensee suffered by the infringement. And that question [is] primarily: had the Infringer not infringed, what would the Patentee Holder-Licensee have made?”

377 U.S. at 507, 141 U.S.P.Q. [BNA] at 694 (plurality opinion) [citations omitted]. This surely states a “but for” test. In accordance with the Court’s guidance, we have held that the general rule determining actual damages to a patentee that is itself producing the patented item is to determine the sales and profits lost to the patentee because of the infringement. Del Mar, 836 F.2d at 1326, 5 U.S.P.Q.2d [BNA] at 1260; see State Indus., Inc. v. Mor-Flo Indus., Inc., 883 F.2d 1573, 1577, 12 U.S.P.Q.2d [BNA] 1026, 1028 [Fed. Cir. 1989], cert. denied, 493 U.S. 1022 [1990] [award of damages may be split between lost profits as actual damages to the extent that they are proven and a reasonable royalty for the remainder]. To recover lost profits damages, the patentee must show a reasonable probability that, “but for” the infringement, it would have made the sales that were made by the infringer. Id. King Instrument Corp. v. Otari Corp., 767 F.2d 853, 863, 226 U.S.P.Q. [BNA] 402, 409 [Fed. Cir. 1985], cert. denied, 475 U.S. 1016, 89 L. Ed. 2d 312, 106 S. Ct. 1197 (1986).26

In a method patent case, a lost profits award, on a patented method of installing an unpatented drilling platform, was reversed because the patentee’s damages expert had based lost profits on the value of the platform when other methods of installing could have been used.\(^\text{27}\) In another case, an award to the patentee of lost profits was affirmed despite defendant’s argument that it could have avoided infringement by manufacturing its accused product overseas, though it had not done so.\(^\text{27.1}\)

Where two corporations, owned by the same parent, had been set up so that one subsidiary owned a patent but did not make or sell the product and the other subsidiary was a non-exclusive licensee under it, patent damages in a lawsuit by the patent owner against a defendant could not be awarded to the patent owner on the lost profits of the licensee.\(^\text{28}\)

\section*{§ 9:3.2 Panduit Test for Lost Profits}

A widely followed test for availability of lost profits as the measure of damages to be applied was announced by the Sixth Circuit as follows:

The statute 35 U.S.C. § 284, requires that the patent owner receive from the infringer “damages adequate to compensate for the infringer” . . . to obtain as damages the profits on sales he would have made absent the infringement, i.e., the sales made by the infringer, a patent owner must prove: (1) demand for the patented product, (2) absence of acceptable non-infringing substitutes, (3) his manufacturing and marketing capability to exploit the demand, and (4) the amount of the profit he would have made.\(^\text{29}\)

The Federal Circuit has characterized the Panduit test as being “accepted as a useful, but non-exclusive, way for a patentee to prove entitlement to lost profits’ damages.”\(^\text{30}\)

\subsection*{[A] Demand for Patented Product}

The first of the Panduit factors, the existence of demand for the patented product, can usually be met by showing a substantial number

\begin{itemize}
  \item \textit{27.1.} Edwards Lifesciences AG v. CoreValve, Inc., 699 F.3d 1305 (Fed. Cir. 2012).
  \item \textit{28.} Poly-Am., L.P. v. GSE Lining Tech., Inc., 383 F.3d 1303 (Fed. Cir. 2004).
  \item \textit{30.} \textit{Rite-Hite Corp.}, 56 F.3d at 1545.
\end{itemize}
of sales by the infringer itself. This showing can be augmented by the patent owner’s evidence of its own sales of the patented product.

Cases in which the demand for the patented product cannot be shown are rare. Where the patent owner is itself a manufacturer of the patented product and the sales by the infringer have been at a low level, such a situation could theoretically arise. However, the demand for the patented product is not usually the subject of much controversy in application of the Panduit test.

[B] Absence of Acceptable Noninfringing Substitute

The Panduit factor of “absence of acceptable non-infringing substitutes” is often a vigorously contested issue, although the opportunity for an infringer to prevail on this issue is narrowed by some Federal Circuit rulings.

In general, “it is not necessary for the patent holder to negate all possibilities that a purchaser might have bought a different product or might have foregone the purchase of altogether.” The most limiting ruling of the Federal Circuit, from the standpoint of the infringer contending for acceptable substitutes, appears in Uniroyal, Inc., in which the court observed that

> mere existence of a competing device does not make that device an acceptable substitute. . . . A product lacking the advantages of that patented can hardly be termed a substitute ‘acceptable’ to the customer who wants those advantages.

In determining whether something is an acceptable substitute, it is necessary to consider whether the allegedly noninfringing substitute has a disparately higher price than the patented product. The importance of price to the acceptability of substitutes was illustrated in a patent infringement case involving wind-surfing boards. The Federal Circuit found that an infringer competed in the market for

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35. Id., 939 F.2d at 1545–46.
the relatively cheaper boards, while the patent holder competed only in the market for high-end boards. Consumers who did not have the option of the infringer’s product, the court reasoned, would look to cheaper, noninfringing substitutes. Because these cheaper substitutes did not compete in the market with the patented products, they could not be considered “acceptable” substitutes.

Once absence of acceptable substitutes is demonstrated, the burden then shifts to the infringer to prove that acceptable noninfringing substitutes do exist. In order to be considered an acceptable noninfringing substitute, the candidate competing product must actually have been on the market at the time of the infringement. The Federal Circuit has held that a product disclosed in another patent or publication but not actually on the market during the period of infringement does not qualify as a noninfringing substitute.

Nonetheless, there are circumstances where an infringer has succeeded in proving the availability of acceptable noninfringing substitutes. In making such an attack, the infringer may prevail if it can show that the patentee’s customers purchased its products not because of the advantages springing from the claimed invention but for other reasons, such as market power or other nontechnical reasons. In


38. BIC Leisure Prods., Inc., 1 F.3d at 1217–19.


41. See Slim Fold Mfg. Co. v. Kinkead Indus., Inc., 932 F.2d 1453, 1458, 18 U.S.P.Q.2d 1842 (Fed. Cir. 1991) [neither plaintiff’s nor defendant’s market share changed significantly after the “new” patented product was introduced]; Gargoyles, Inc. v. United States, 113 F.3d 1572, 1578, 42 U.S.P.Q.2d 1760 (Fed. Cir. 1997) [although lacking the patented product’s benefits, substitute was adequate for government contractor’s use and, therefore, acceptable]; Ericsson, Inc. v. Harris Corp., 352 F.3d 1369, 69 U.S.P.Q.2d 1109 (Fed. Cir. 2003) [noninfringing substitutes requirement may alternatively be satisfied by proof of market share].
Determining whether there are acceptable noninfringing substitutes for
a patented product, from both a technical and a price standpoint, one
useful technique is to conduct a survey among potential customers,
using neutral surveying techniques and a statistically significant
sample group of polled prospective customers.

A complicating factor in the analysis arises where the patent owner
has granted licenses, since the licensee’s product is plainly acceptable
and noninfringing. A product licensed by virtue of a voluntary settle-
ment was not a noninfringing substitute during the period prior to the
license, but it became one after the license began. After such a
license, while there may still may be availability of lost profits on some
portion of the defendant’s sales, the market share that would have
been taken by the licensee as a noninfringing substitute must be taken
into account and only reasonable royalty damages are available on that
proportion of the infringer’s sales.

[C] Capacity

The third of the Panduit factors is the patent owner’s manufactur-
ing and marketing capability to satisfy the additional demand repre-
sented by the infringer’s sales.

This analysis involves adding together the patentee’s sales and
infringer’s sales and determining whether the patentee would have
had the ability to meet the total demand if the infringement had not
occurred. Of course, it would be unrealistic to expect that the patent
owner should be able to have met the infringer’s sales instantly when,
in the absence of the infringement, it would have built up its capacity
at a slower rate to meet expanding demand. In making the determina-
tion of capacity, the patent owner may properly rely upon its existing
capacity estimate, its ability to increase its capacity by an increase in
the number of shifts worked or by subcontracting out work, and its
ability to expand its facilities to meet the increased demand.

The patent owner’s proof of capacity may be attacked in a number
of ways. In one case, the time-consuming capital investment required
of the plaintiff to meet the projected capacity of the infringer’s sales
limited the recovery for infringement. Despite evidence that the

42. Pall Corp. v. Micron Separations, Inc., 66 F.3d 1211, 1222–23, 36
U.S.P.Q.2d 1225 (Fed. Cir. 1995), cert. denied, 520 U.S. 1115, 1117
S. Ct. 1243 [1997].
43. Id.
1992].
324105 [D. Mass. 1990].
plaintiff could have raised the capital necessary to meet capacity, the

court also relied on the plaintiff’s actual conservative business prac-

tices and decision-making history in determining that the plaintiff

would not have met 100% of the infringer’s output.46

Forecasts of growth rates have been allowed in determining
capacity. For example, a court relied on an expert’s testimony of the
plaintiff’s growth rates in 1988 and 1989, concluding that the
company could have increased its capacity from ninety-six units per
year in 1988 to 500 units per year in 1992.47

There is no single dispositive method for judging whether a court
would allow a finding of capacity. Moreover, it is not necessary to prove
with absolute certainty that capacity could be met.48

[D] Quantum of Lost Profits

Although denominated as the fourth Panduit factor, the amount of

lost profits is not a causation factor. Accordingly, it is separately
discussed below in section 9:4.

§ 9:3.3 Alternatives to Panduit Test

Although the Panduit test remains the most commonly used
standard, the Federal Circuit has pointed out that it is not the
exclusive test of the causation factor required for a lost profits measure
of recovery.49 There are other bases for causation.

For example, a finding of causation may be inferred when the
patentee and infringer are the only two suppliers in a market.
The Federal Circuit made such an inference in the Lam case.50 There,
the court declined to exercise the Panduit test, stating that the plaintiff’s

Gargoyles, Inc. v. United States, 113 F.3d 1572, 1577, 42 U.S.P.Q.2d 1760
[Fed. Cir. 1997] (an expectation of lower profit margins and a lower quality
acceptable for government use as the result of hypothetical increased
output precluded a finding of capacity to meet demand).
48. A general showing of an increase in market share, even with a contrary
showing of production backlogs, was sufficient for the court to infer
capacity. Micro Motion, Inc. v. Exac Corp., 761 F. Supp. 1420, 1425, 19
U.S.P.Q.2d 1001 [N.D. Cal. 1991]. See also Yarway Corp. v. Eur-Control
USA, Inc., 775 F.2d 268, 276–77, 227 U.S.P.Q. 552 [Fed. Cir. 1985]; W.L.
[Fed. Cir. 1983].
showing of decreased sales coinciding with the infringing action, within the two-supplier market, was sufficient to infer causation.\textsuperscript{51} The court stated that the patentee’s burden for showing causation is not an absolute one, but rather a burden of reasonable probability.\textsuperscript{52}

In another case, although it relied on the \textit{Panduit} test, the district court stated the following:

Where the infringing copy is an identical copy, or a virtually identical copy, of the commercial version of the patented invention, and particularly where the infringing product and the commercial version of the patented invention have common advantages over different, noninfringing—albeit perhaps “competing”—products, it is reasonable to infer that the patentee probably would have made the sale but for the infringing sale.\textsuperscript{53}

\section*{§ 9:3.4 Lost Profits or Infringers’ Profits on a Design Patent}

A winning design patent owner is entitled to an award of the infringers’ profits under 35 U.S.C. § 289 without having to show willfulness. When the same infringing product is also covered by a utility patent owned by the same patentee, the patent may recover only once for the infringement, receiving whichever award is higher.\textsuperscript{54}

\section*{§ 9:4 Calculation of Amount of Lost Profits}

It is well settled that a patent owner may not recover an infringer’s profits, but may recover only its own lost profits.\textsuperscript{55} There are several bases that contribute to the patent owner’s lost profits, as described below.

\section*{§ 9:4.1 Profits on the Patented Product Lost to the Infringing Products}

The most common basis for calculation of a patent owner’s lost profits is its lost profits on its own sales of the patented product or of

\begin{thebibliography}{55}
\bibitem{51} Id.
\bibitem{52} Id.
\bibitem{55} Atlas-Pac. Eng’g Co. v. Geo. W. Ashlock Co., 339 F.2d 148, 290, 144 U.S.P.Q. 55 (9th Cir. 1964), \textit{cert. denied}, 382 U.S. 842, 86 S. Ct. 55 (1965) [patent holder may recover whatever damages it incurred because of the infringement but profits made by infringer are not recoverable as such].
\end{thebibliography}
products made by a patented process. In calculating the profits that the patent owner lost, where the owner is a maker of the patented product itself, a common methodology is to attribute to the owner the number of units of infringing products sold by the infringer and to compute the owner’s profit per unit on its own sales. Then multiplying the number of units sold by the infringer by the patent owner’s profit per unit determines the profits that the owner would have made on those sales [subject to adjustments, for example, for increase in fixed capacity and market share]. Although speculation about the amount of lost profits is improper, the amount need not be proved with exact precision.\(^{56}\) The patent owner is not required to show that it would have bid on every sale that an infringer made.\(^{57}\)

The patent owner’s lost profits are measured at its level of incremental profits and not operating profits. In most decisions regarding lost profits, it is considered improper to allocate a portion of fixed or overhead costs to the hypothetically increased sales. All fixed costs are considered to have been charged to the sales that the patent owner actually made. Charging them again would leave the plaintiff less than fully compensated for the infringement. As a trial court has observed, “[t]hese fixed overhead expenses would have neither increased nor decreased had the plaintiff’s production incorporated the defendant’s additional sales. Plaintiff’s fixed overhead expenses had already been amortized over and paid out of plaintiff’s actual sales.”\(^{58}\) Although the profit per unit is calculated on an incremental profits basis, the damage award must be reduced by the amount of any increase in fixed capital, properly amortized, needed to expand the capacity to satisfy the infringing sale.\(^{59}\) In using the patentee’s incremental profits to calculate lost profits, the calculation does not usually give any consideration to the circumstance that the infringer’s sales may have

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59. See Andrew Corp. v. Gabriel Elec., Inc., 785 F. Supp. 1041, 1049–51, 23 U.S.P.Q.2d 1019 (D. Me. 1992) [plaintiff’s costs rose as its sales increased, despite their categorization as “fixed” overhead; damages had to be lessened accordingly).
been at a lower price because the object of the statute is to make the patentee whole for the damages it has suffered.\(^{60}\)

\section*{§ 9:4.2 Profits on Unpatented Products Sold by the Patentee Lost to Infringing Products}

Although the common situation of lost profits involves the patentee’s own sales of its patented products, a patent owner may suffer lost sales of an unpatented product to a competitor’s product that infringes the patent owner’s patent. In a leading case, \textit{Rite-Hite Corp. v. Kelley Co.},\(^{61}\) the patent owner was permitted to recover its lost profits due to the infringement by the defendant, notwithstanding the circumstance that the profits were lost on a product of the patentee not covered by its patent. In \textit{Rite-Hite}, the patentee made and marketed unpatented “ADL-100” devices, for securing a vehicle to a loading dock, which lost sales to the defendant’s “Truck Stop” device that was found to infringe Rite-Hite’s patent No. 4,373,847. Rejecting the arguments of the infringer, Kelley, that compensability must be restricted to profits lost on products sold by the patentee covered by its patent, the court reasoned as follows:

Kelley has thus not provided, nor do we find, any justification of the statute, precedent, policy or logic to limit the compensability of lost sales of a patentee’s device that directly competes with the infringing device, if it is proven that those lost sales were caused in fact by the infringement, such lost sales are reasonably foreseeable and the award of damages is necessary to provide adequate compensation for infringement under 35 U.S.C. § 284.\(^{62}\)

\section*{§ 9:4.3 Profits on Ancillary Products Meeting the Entire Market Value Test}

There are cases in which sales of a patented product involves ancillary sales of unpatented parts, sold with the patented product, which have no separate marketable value. The Federal Circuit has explained that damages are available on the combination of the

\begin{itemize}
\item 62. \textit{Rite-Hite Corp.}, 56 F.3d at 1548–49.
\end{itemize}
patented product and the ancillary parts under what is called the “entire market value rule.” Not all ancillary sales often accompanying a sale of the patented product satisfy the test of the entire market value rule. In *Rite-Hite*, the court set aside an award of lost profits on “dock leveler” devices that Rite-Hite frequently sold with its ADL-100 restraint devices, finding that

> [t]he facts of this case do not meet this requirement. The dock levelers operated to bridge the gap between a loading dock and a truck. The patented vehicle restraint operated to secure the rear of the truck to the loading dock. Although the two devices may have been used together, they did not function together to achieve one result and each could effectively have been used independently of each other.

In another example, the reach of the entire market value rule was impermissible to expand the damages base beyond the smallest salable patented practicing unit. In that case, the smallest salable patented practicing unit was found to be an optical discriminating device used for transferring data from an optical disc to a laptop computer but not to include the computer itself.

Thus, while lost profits may be available on unpatented products that are sold with the patented product, they will be recoverable only when the unpatented devices together with the patented device constitute a functional unit.

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64. *Rite-Hite Corp.*, 56 F.3d at 1550–51.
65. *Id.*
66. Juicy Whip, Inc. v. Orange Bang, Inc., 382 F.3d 1367, 72 U.S.P.Q.2d 1385 (Fed. Cir. 2004) (it is not fatal to this principle that the unpatented material, unpatented syrup used with the patented orange drink dispenser, may have some usability independent of use in the patented device).
“Convoyed products” are unpatented products that the patent owner commonly sells as supplies or ancillary products to the patented product but that do not meet the test for lost profits damages embodied in the entire market value rule discussed above. An example is unpatented disposable supplies, such as copier paper, supplied for use with a patented copier. While the patent owner’s expectation of profit on sales of convoyed products can be given weight in the analysis of reasonable royalties as factor 6 of the Georgia-Pacific factors [see section 9:5.6], they do not qualify for a lost profits measure of recovery.67

§ 9:4.4 Profits Lost Due to Price Erosion Damages

In some cases, infringement of a patent has caused the patent owner to reduce its prices to meet the infringement, thereby causing it an additional component of lost profits not only on the sales which were lost to the infringer but also on the patent owner’s own sales at the reduced price. This additional component of lost profits is commonly referred to as price erosion damages. In a case where the patentee’s own sales are much more substantial than the infringer’s sales, the lost profits damages attributable to price erosion can exceed the lost profits damages attributable to the infringer’s own sales.

Erosion of price may be inferred, much as causation may be, when a patentee lowers its prices in a two-supplier market. The Federal Circuit found that in a predominantly two-supplier market, where the patentee lowered its prices to meet the infringer’s competition, an award based on reduced profits was proper.68 Although competition with the infringer was not the sole reason for the price reduction, it was sufficient to support an award based on price erosion. Price erosion includes loss of profits caused by diminished sale prices and special discounts the plaintiff had to give in order to remain competitive.69 If expert testimony suggests price erosion damages, the expert’s testimony that the patentee could have maintained a higher price can

support an award of lost profits.\footnote{Kalman v. Berlyn Corp., 914 F.2d 1473, 1485, 16 U.S.P.Q.2d 1093 [Fed. Cir. 1990] (award of 15% above sales price for maintenance of depressed prices based on such expert testimony).} Price erosion evidence may also be provided by testimony from the infringer’s customers, for example, that they would not have switched to assertedly noninfringing alternatives to avoid the plaintiff’s higher prices.\footnote{SynQor, Inc. v. Artesyn Techs., Inc., 709 F.3d 1365 [Fed. Cir. 2013].} Price erosion component of damages based on “lost profits” may be shown by similarities between a benchmark market and the market in which price erosion is alleged.\footnote{Ericsson, Inc. v. Harris Corp., 352 F.3d 1369, 69 U.S.P.Q.2d 1109 [Fed. Cir. 2003].}

A patent owner can also argue for continuing price erosion damages based on difficulty in reestablishing former prices after having to reduce prices in response to infringing sales. In one case, the Federal Circuit upheld a damages award where the damages for continuing price erosion were about one and a half times those for lost profits and past price erosion combined.\footnote{72. Fiskars, Inc. v. Hunt Mfg. Co., 2000 U.S. App. LEXIS 17767 [Fed. Cir. July 24, 2000] [in light of difficulty in attempting to reestablish former prices after having to reduce prices in response to infringing sales, an award of about $1.8 million for future price erosion was not speculative].}

Price erosion damages are, however, often difficult to prove because the patent owner may have reduced its prices for other reasons than the infringement, for example, to meet competition from noninfringing devices or from other infringers than defendant or to reduce prices because of other economic factors such as increased manufacturing efficiencies, reduction in raw material costs, or increased sales resulting in reduced overhead per unit.\footnote{Exemplary cases in which price erosion damage claims failed include BIC Leisure Prods., Inc. v. Windsurfing Int’l, Inc., 1 F.3d 1214, 1220, 27 U.S.P.Q. 1671 [Fed. Cir. 1993], dismissed, 45 F.3d 442 [1994] [finding that market forces other than competition with the infringer, namely competition with noninfringers, forced the patentee to lower prices, thus denying a finding of eroded prices]; Minco, Inc. v. Combustion Eng’g, Inc., 95 F.3d 1109, 1120, 40 U.S.P.Q.2d 1001 [Fed. Cir. 1996] [where there was evidence of price fluctuation and that the plaintiff was a leader in price-cutting in the market]; Vulcan Eng’g Co. v. Fata Aluminum, Inc., 278 F.3d 1366, 61 U.S.P.Q.2d 1545 [Fed. Cir. 2002].}

\section*{\textsection 9:5 Reasonable-Royalty Measure of Recovery}

In general, evidence used by an expert witness to prove the quantum of damages must be reliable. For example, a rule of thumb that a baseline point for assessing patent infringement damages would be 25\% of the licensee’s expected profit rate on the patented item has been held
inadmissible “under Daubert and the Federal Rules of Evidence, because it fails to tie a reasonable royalty base to the facts of the case.”

§ 9:5.1 Reasonable Royalty Based on Hypothetical Pre-Infringement Negotiations

The damages statute provides that damages shall be adequate to compensate for the agreement but not less than a reasonable royalty.

The “reasonable” rate of the royalty may be based upon, but not limited to, an established royalty. If there is no established royalty, the rate will be based upon the result of a hypothetical negotiation between the plaintiff and defendant before the infringement began. Such hypothetical negotiations do not include any consequential damages which may occur due to the infringer’s refusal to take a license. Such damages are simply a species of lost profits.

The Federal Circuit has recognized that, in the case of a patentee who refuses to license the invention, a reasonable royalty is a fiction that could damage the patentee by placing the infringer in a no-lose position in which it would be entitled in effect to a compulsory license for past damages. The Federal Circuit has also held that because the hypothetical negotiation takes place at the time of the first infringement, licenses negotiated years after that time may be irrelevant for hypothetical negotiation analysis. In a case where reasonable royalty was measured by comparison to an extant license at a rate that

74. Uniloc USA Inc. v. Microsoft Corp., 632 F.3d 1292, 1315 (Fed. Cir. 2011). However, a reference to the flawed 25% rule in a damage expert’s damages conclusion did not require it to be set aside where the expert’s conclusion was supported by other factors independent of the flawed rule. Energy Transp. Grp., Inc. v. William Demant Holding A/S, 697 F.3d 1342 (Fed. Cir. 2012).


78. Odetics, Inc. v. Storage Tech. Corp., 14 F. Supp. 2d 785 [E.D. Va. 1998] [court found that two licenses for the infringed patent that the plaintiff granted to third parties four and five years after the date of the first infringement were irrelevant for hypothetical negotiation analysis because of changing technology and financial landscape], aff’d in part and rev’d in part on other grounds, 185 F.3d 1259, 51 U.S.P.Q.2d 1225 [Fed. Cir. 1999]; Interactive Pictures Corp. v. Infinite Pictures, Inc., 274 F.3d 1371, 61 U.S.P.Q.2d 1152 [Fed. Cir. 2002] [reasonable royalty based on fraction of profits estimated before infringement began would not be disturbed even though the projected profits were not achieved].
changed with time, the Federal Circuit has held that the rate to apply is the one that would have been in effect during the period for which damages were available.\textsuperscript{79} Reasonable royalty does not include a percentage of the value attributed to goodwill upon sale of the infringer’s business, where it was a one-product business, when there has been a separate reasonable royalty award based on the infringing product.\textsuperscript{80}

Several different approaches to determining the value of the reasonable royalty have emerged, as discussed in the following sections.

\section*{§ 9:5.2 Reasonable Royalty Based on a Fraction of the Patentee’s Lost Profits}

One approach to determining the reasonable royalty focuses on the unit profits that the patent owner would forego by licensing. Under this approach, a reasonable royalty of 50\% of the patent owner’s lost profits was found to be an appropriate measure and affirmed by the Federal Circuit in \textit{Rite-Hite}.\textsuperscript{81} The Federal Circuit provided the following analysis:

The district court here conducted the hypothetical negotiation analysis. It determined that Rite-Hite would have been willing to grant a competitor a license to use the ‘847 invention only if it received a royalty of no less than one-half of the per unit profits that it was foregoing. In so determining, the court considered that the ‘847 patent was a “pioneer” patent with manifest commercial success; that Rite-Hite had consistently followed a policy of exploiting its own patents, rather than licensing to competitors; and that Rite-Hite would have had to forego a large profit by granting a license to Kelley because Kelley was a strong competitor and Rite-Hite anticipated being able to sell a large number of restraints and related products. \textit{See also Deere \& Co. v. International Harvester Co.}, 710 F.2d 1551, 1559, 218 U.S.P.Q. 481, 487 [Fed. Cir. 1983] \{court may consider impact of anticipated collateral sales\}; \textit{Georgia-Pacific Corp. v. United States Plywood Corp.}, 318 F. Supp. 1116, 166 U.S.P.Q. 235, [S.D.N.Y. 1970] \{wide range of factors relevant to hypothetical negotiation\}, \textit{modified and aff’d}, 446 F.2d 295, 170 U.S.P.Q. 369 [2d Cir.], \textit{cert. denied}, 404 U.S. 870, 30 L. Ed. 2d 114, 92 S. Ct. 105 (1971). It was thus not unreasonable for the district court to find that an unwilling patentee would only license for one-half its expected lost profits and that such an amount was a reasonable royalty. The fact that

\begin{itemize}
  \item \textsuperscript{79} Harris Corp. v. Ericsson, Inc., 417 F.3d 1241, 75 U.S.P.Q.2d 1705 [Fed. Cir. 2005].
  \item \textsuperscript{80} Transclean Corp. v. Bridgewood Servs., Inc., 290 F.3d 1364, 62 U.S.P.Q.2d 1865 [Fed. Cir. 2002].
  \item \textsuperscript{81} \textit{Rite-Hite Corp.}, 56 F.3d at 1554–55.
\end{itemize}
the award was not based on the infringer’s profits did not make it an unreasonable award. See State Indus., 883 F.2d at 1580, 12 U.S.P.Q.2d at 1031. “The determination of a reasonable royalty . . . is based not on the infringer’s profit margin, . . . [t]here is no rule that a royalty be no higher than the infringer’s net profit margin.”; Stickle v. Heublein, Inc., 716 F.2d 1550, 1563, 219 U.S.P.Q. 377, 387 [Fed. Cir. 1983] [royalty need not be less than price of infringing unit]. Furthermore, the fact that the award was based on and was a significant portion of the patentee’s profits also does not make the award unreasonable. The language of the statute requires “damages adequate to compensate,” which does not include a royalty that a patentee who does not wish to license its patent would find unreasonable. See Del Mar, 836 F.2d at 1328, 5 U.S.P.Q.2d at 1261 [“[The] imposition on a patent owner who would not have licensed his invention for [a certain] royalty is a form of compulsory license, against the will and interest of the person wronged, in favor of the wrongdoer.”] Moreover, what an infringer would prefer to pay is not the test for damages. See TWM, 789 F.2d at 900, 229 U.S.P.Q. at 528 [holding that the parties might have agreed to a lesser royalty is of little relevance, for to look only at that question would be to pretend that the infringement never happened; it would also make an election to infringe a handy means for competitors to impose a compulsory license policy upon every patent owner].

We conclude that the district court made no legal error and was not clearly erroneous in determining the reasonable royalty rate. Accordingly, we affirm the trial court’s calculation of a reasonable royalty rate.

This reasoning has since been followed at the trial court level. 82

In computing reasonable royalty in an action against an infringer by an owner of a patent on a process using a particular catalyst, in which the owner did not itself practice the invention, the Federal Circuit has approved the admission of evidence of the impact of the infringer’s sales on the sales of the process-practicing parent company of the patent owner as a relevant factor. 83

82. C.R. Bard, Inc. v. Medtronic, Inc., Case No. C.A. 96-589-SLR, 1999 WL 458305, at *11 [D. Del. June 15, 1999], aff’d in part, vacated in part on other grounds, 2000 WL 868581 [Fed. Cir. June 29, 2000] [Delaware district court adopted Rite-Hite measure of reasonable royalty based on half of patentee’s expected lost profits; when defendant argued that jury’s royalty award was excessive and contrary to the evidence, the court cited Rite-Hite for the proposition that, because the jury’s royalty award was about half of plaintiff’s lost profits, it was neither excessive nor contrary to the evidence].

§ 9:5.3 **Reasonable Royalty Based on a Fraction of Infringer’s Anticipated Profit**

Since the hypothetical negotiation must take place at the time the infringement commences, there will be no record of actual profits of the infringer available to serve as a starting point for calculation of what fraction the infringer would be willing to pay as a license. Commonly, however, there will have been projections of the anticipated profit that the infringer would receive. The projected net profit can be an appropriate starting point for determination of the reasonable royalty rate.\(^{84}\)

§ 9:5.4 **Reasonable Royalty Limited by the Differential Cost of Using an Alternative Noninfringing Technology**

A limitation on the amount of a reasonable royalty can sometimes be advanced on the basis of the savings effected by the invention over the nearest available noninfringing technology. The theory is that, if there is an available alternative, an infringer would not pay a higher royalty than the savings, or profit, that it could obtain by use of the patented technology. Limiting reasonable royalty based on predicted savings by the patented technology is an established principle.\(^{85}\)

§ 9:5.5 **Reasonable Royalty Based on a Flat Fee or Milestone Payments**

For infringement involving only testing of the patented product or process, there are no sales to support a reasonable royalty. In such precommercialization cases, a reasonable royalty may be based on a flat fee or milestone payments.\(^{86}\)

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84. See, e.g., TWM Mfg. Co. v. Dura Corp., 789 F.2d 895, 899, 229 U.S.P.Q. 525 [Fed. Cir. 1986] [infringer had anticipated a net profit of 37%–42% of unit sales and court affirmed a jury finding of damages based on a 30% royalty as reasonable].

85. Tights, Inc. v. Kayser-Roth Corp., 442 F. Supp. 159, 163–64, 196 U.S.P.Q. 750 [M.D.N.C. 1977] [finding that “cost savings [were] a highly reliable and significant factor in determining what a willing licensee would agree to pay a willing licensor for use of the [patented] invention”].

86. Embrex, Inc. v. Serv. Eng’g Corp., Case No. 99-1064, 2000 U.S. App. LEXIS 15036, at *15–16 [Fed. Cir. June 28, 2000] [finding that the “parties may choose other methods to compute the amount that a licensee may pay for the right to use a patented product or process, such as flat fees or milestone payments in the case of precommercialization licenses].
§ 9:5.6 Georgia-Pacific Factors

A lengthy, but nonexhaustive, list of factors bearing on the determination of a reasonable royalty has become known as the Georgia-Pacific factors and has gained noticeable acceptance over the years, including at the Federal Circuit. The trial judge in Georgia-Pacific identified the following list of factors:

1. The royalties received by the patentee for the licensing of the patent-in-suit, proving or tending to prove an established royalty.
2. The rates paid by the licensee for the use of other patents comparable to the patent-in-suit.
3. The nature and scope of the license, as exclusive or non-exclusive; or as restricted or non-restricted in terms of territory or with respect to whom the manufactured product may be sold.
4. The licensor’s established policy and marketing program to maintain his patent monopoly by not licensing others to use the invention or by granting licenses under special conditions designed to preserve that monopoly.
5. The commercial relationship between the licensor and licensee, such as, whether they are competitors in the same territory in the same line of business; or whether they are inventor and promoter.
6. The effect of selling the patented specialty in promoting sales of other products of the licensee; the existing value of the invention to the licensor as a generator of sales of his non-patented items; and the extent of such derivative or convoyed sales.
7. The duration of the patent and the term of the license.


88. Interactive Pictures Corp. v. Infinite Pictures, Inc., 274 F.3d 1371, 61 U.S.P.Q.2d 1152 (Fed. Cir. 2002) (consideration by jury of value of convoyed products in estimating both royalty base and royalty rate was not such error as to require reversal of jury award); Union Carbide Chems. & Plastics Tech. Corp. v. Shell Oil Co., 425 F.3d 1366; 76 U.S.P.Q.2d 1705 (Fed. Cir. 2005) [evidence properly admitted of convoyed sales of monoethylene glycol (MEG) in a case involving a patented catalyst for converting ethylene and oxygen into ethylene oxide (EO), where the majority of the EO was used to make MEG).
8. The established profitability of the product made under the patent; its commercial success; and its current popularity.

9. The utility and advantages of the patent property over the old modes or devices, if any, that had been used for working out similar results.

10. The nature of the patented invention; the character of the commercial embodiment of it as owned and produced by the licensor; and the benefits to those who have used the invention.

11. The extent to which the infringer has made use of the invention; and any evidence probative of the value of that use.

12. The portion of the profit or of the selling price that may be customary in the particular business or in comparable businesses to allow for the use of the invention or analogous inventions.

13. The portion of the realizable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer.

14. The opinion testimony of qualified experts.

15. The amount that a licensor (such as the patentee) and a licensee (such as the infringer) would have agreed upon (at the time the infringement began) if both had been reasonably and voluntarily trying to reach an agreement; that is, the amount which a prudent licensee—who desired, as a business proposition, to obtain a license to manufacture and sell a particular article embodying the patented invention—would have been willing to pay as a royalty and yet be able to make a reasonable profit and which amount would have been acceptable by a prudent patentee who was willing to grant a license.

Not all relevant factors are listed in the Georgia-Pacific factors. For example, the amount paid to buy a company that originated the patents-in-suit can be a relevant factor to the reasonableness of a hypothetical royalty.\(^9\) Nor do any of the Georgia-Pacific factors set a cap on the reasonable royalty that a court can award; for example, the reasonable royalty is not capped by the cost of switching to an alternative noninfringing technology or by the royalty rate at which

the patent holder licenses its wholly owned subsidiaries under its patent.  

On the first of the Georgia Pacific factors, royalties received for the licensing of the patent, it has been conventional for the patent owner to produce copies of licenses signed with third-party licensees under the patent. Patentees have frequently resisted producing documents, or providing testimony, concerning negotiations that preceded these licenses, based on an assertion of privilege under Rule 408 of the Federal Rules of Evidence. However, the Federal Circuit ruled in 2012 that settlement negotiations with third-party licensees under the patent related to reasonable royalties and damage calculations are not protected against discovery by a settlement negotiation privilege.  

§ 9:5.7  Blended Damages Award of Lost Profits and Reasonable Royalty Based on Market Share

The earlier lost profits discussion focused on essentially a two-seller market for the patented product, namely, the patentee and the infringer. In such circumstances, in the absence of noninfringing alternatives, a reasonable probability may be found that “but for” the infringer’s sales all the customers would have purchased from the patent owner. Where there are multiple infringers of the patent or licensees of the patent, the possibility exists that, absent the defendant infringer, a significant share of the sales taken by the defendant may have been taken by other infringers or by licensees of the patent owner, preventing a “but for” conclusion.

In such a situation, the Federal Circuit has embraced a market share approach in which the patent owner is entitled to a lost profits measure of recovery on its market share of all sales of the patented product applied to the sales of the accused infringer, with damages on the remainder of the infringer’s sales being assessed on a reasonable royalty basis. In that case, involving a patent on insulated water heaters, the defendant Mor-Flo had established its fractional share of the national market for foam-insulated water heaters. The court affirmed the trial court’s blended damages award to the patentee,


90.1. In re MSTG, Inc. 675 F.3d 1337, 1348 (Fed. Cir. 2012).

State, of (1) its incremental profit on foam-insulated gas water heaters based on State’s share of Mor-Flo’s infringing sales and (2) reasonable royalty on the remainder of Mor-Flo’s infringing sales.92

The State Industries market share approach is significant because it permits lost profits recovery in a situation of multiple suppliers and infringers of the patented invention, thereby liberating the lost profits analysis from the straitjacket of the two-supplier market approach.

§ 9:5.8 Liquidated Damages Against Violating Licensee

In some cases, a defendant may be a licensee operating outside a contractual restriction in the license who thus incurs liability as an infringer. If there is a liquidated damages clause in the agreement, it may be considered in assessing damages. Some reported cases of this type involve farmers purchasing Monsanto’s “Round-up Ready” genetically modified, patented soybean seed. The license permitted the purchasers to use the genetically modified seed to plant a first crop, but prohibited them from planting seed saved from the first crop and set a liquidated damages clause for infringement resulting from growing the saved seed. However, the liquidated damages will not be applied if they use an unreasonable multiplier unrelated to the actual damages suffered under an applicable state law of the “anti-one-size” rule type.93 However, in a subsequent case against a different farmer, the Federal Circuit affirmed an award of damages made on a “reasonable royalty” basis per sack of seed that was higher than they would have been under the liquidated damages multiplier in Monsanto’s license.94

§ 9:5.9 Compelled Royalty for a Winning Patentee After Denial of a Permanent Injunction

In 2006, the Supreme Court ruled that a trial court could deny a winning patentee a permanent injunction for equitable reasons.95 In 2007, a case arose concerning the future damages that a winning patentee, who had been denied an injunction, should be awarded for

92. Id.
94. Monsanto Co. v. Ralph, 382 F.3d 1374, 72 U.S.P.Q.2d 1515 (Fed. Cir. 2004). See also Monsanto Co. v. David, 516 F.3d 1009, 85 U.S.P.Q.2d 1963 [Fed. Cir. 2008] [case against a third farmer involving violation of the prohibition in the Monsanto license against using second-generation saved seed and computation of reasonable royalty].
continuing infringement absent its voluntary agreement to the
amount.\textsuperscript{96}

In that case, Paice, a domestic engineering research company, had
been issued three U.S. patents on microprocessor-controlled drive
trains for combining the torque outputs of internal combustion and
electric motors in hybrid automobiles. It successfully sued Toyota for
patent infringement but was denied a permanent injunction by the
trial court on equitable grounds. The jury made a damage award to
Paice for past infringement that, when divided by the number of
infringing vehicles, amounted to approximately $25 per accused
vehicle.\textsuperscript{97} The trial court \textit{sua sponte} entered an “ongoing royalty order”
imposing a royalty payment of $25 per accused vehicle sold during the
remaining patent term, payable quarterly.\textsuperscript{98}

On appeal of the ongoing royalty issue, the Federal Circuit re-
manded because the trial court had provided no reasoning to support
the selection of $25 per vehicle as the royalty rate that would enable it
to determine whether the judge had abused his discretion. On remand,
the rate could be reevaluated in the light of additional evidence that
could be received.\textsuperscript{99} The Federal Circuit suggested that before any
imposition of a rate, the trial court might first wish to allow the parties
to negotiate a license regarding future use of the patented invention.\textsuperscript{100}
The Federal Circuit also rejected the patentee’s contention that it was
entitled to a jury trial of the amount of future payments under the
Seventh Amendment, relying on questionably relevant precedent.\textsuperscript{101}

In a concurring opinion, Judge Rader pointed out that an imposed
“ongoing royalty” is a compulsory license in substance. In his view, the
Federal Circuit should have directed, not merely suggested, that the
trial court first give the parties an opportunity to negotiate the rate if
they could. He also suggested that “[i]f the parties cannot reach
agreement, the court would retain jurisdiction to impose a reasonable
royalty to remedy the past and ongoing infringement.”\textsuperscript{102}
In 2008, the Federal Circuit considered the setting of a royalty rate in a case where a permanent injunction had been entered following a judgment for the patentee at trial, but where the injunction had been stayed pending an appeal that resulted in an affirmance of the judgment. In *Amado v. Microsoft Corp.*, the court ruled that the royalty rate to be awarded for the period of the stay should be higher than the rate that the jury had awarded for prejudgment damages, because the relative bargaining position of the patentee in the hypothetical negotiation had been strengthened by the judgment of liability. The case was remanded for the rate determination.

The *Amado* reasoning was applied in the remanded trial proceedings in *Paice v. Toyota* as a basis for awarding a reasonable royalty higher than would have been arrived at under an application of the *Georgia-Pacific* factors before the judgment of liability.

Another issue can arise in the interface between the equitable power of a court to deny a winning patentee an injunction and the setting of a reasonable royalty rate that will adequately compensate for its injury. That issue depends on the damages model that the patentee evidenced to the jury for its damages. If the damages model incorporated an up-front market entry fee as part of the sought-for damages, the payment of the fee can be considered probative that the parties expected the defendant to have an extended period in the market—a factor for denying the plaintiff a permanent injunction.

§ 9:5.10 *Reasonable Royalty, Entire Market Value, and Surveys*

In 2012, the Federal Circuit held that

> [w]here small elements of multi-component products are accused of infringement, calculating a royalty on the entire product carries a considerable risk that the patentee will be improperly compensated for non-infringing components of that product. Thus, it is generally required that royalties be based not on the entire product but instead on the “smallest salable patent-practicing unit.” . . .

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104. *Id.* at 1362.
The entire market value rule is a narrow exception to this general rule.\(^{106.1}\)

It has since been suggested by a commentator that survey methodology may be able to provide a factual basis for making this determination.\(^{106.2}\)

\section*{§ 9:6 Proving the Amount of Damages}

\subsection*{§ 9:6.1 Foundational Fact Evidence of Damages}

The presentation of a damages case by a patent owner typically involves opinion testimony presented by a damages expert, as discussed in section 9:6.2. A foundation for that testimony is laid by fact witnesses on damages, usually including the ones discussed in this section.

\section*{[A] Sales and Marketing Fact Witnesses}

Sales and marketing witnesses will be needed to testify to such subjects as these:

- sales that have been taken from the patent owner by the infringer;
- any reduction of price made in order to meet competition from the infringer;
- sales history of the device before and after the infringement;
- refusal of the patent owner to grant licenses or, if licenses exist, the relative market shares and the erosion of the patent owner’s share by the infringement;
- price elasticity in the market for the product and the patent owner’s ability to raise prices;
- absence of acceptable noninfringing substitutes;
- expulsion from the market of other devices by the patented product; and
- similar topics related to the factual issues of the lost profits claim discussed above.

\begin{footnotes}
\item[106.1] LaserDynamics, Inc. v. Quanta Computer, Inc. 604 F.3d 51, 67 (Fed. Cir. 2012).
\item[106.2] See, e.g., Alexander L. Clemons, Beyond the Smallest Salable Unit: How Surveys Provide a Path from Recent Case Law to an Appropriate Royalty Base, 6 LANDSLIDE No. 5, May/June 2014, at 36–38.
\end{footnotes}
These witnesses may also testify to other damage factors including evidence pertinent to the application of the entire market value to ancillary parts or whether there are sales of convoyed products attendant upon sale of the patented product that should be taken into consideration for setting of reasonable royalty.

[B] Adverse Witnesses Employed by the Infringer

It is sometimes necessary to present adverse witnesses from the infringer’s accounting or sales staff to testify on the expectation of profit that the defendant believed it would achieve at the time the decision was made to go ahead with the infringing product.

It is common to include witnesses from the patentee’s internal accounting staff to explain the procedures used for entering sales and returns and for preparing actual profit calculations and estimates of profit. These witnesses will also be required to authenticate many of the documents relied on for proof of damages, in particular, underlying documents relied on to produce summary documents that have been made available for inspection to the alleged infringer.

[C] Licensing Witnesses

In a reasonable-royalty case where the patent owner already has licensees, the defendant may often wish to call the persons who negotiated licenses under the patent-in-suit to establish what an appropriate royalty rate would be. The parties may also call licensing experts who have negotiated numerous licenses in the same or a closely related industry.

A trial court did not err in allowing testimony on a reasonable royalty rate from a patentee’s damages expert relying on third-party licensing agreements as benchmarks to support the testimony. The alleged failure of the expert to control for variables affecting comparability was best addressed by cross-examination rather than exclusion. 106.3

[D] Capacity Witnesses

Capacity witnesses are typically witnesses from the manufacturing and production sides of the business who testify concerning the capacity of the existing plant to satisfy the increased demand represented by the infringer’s profits and discuss the technical bases on which issues of capacity will be contested, including the plaintiff’s ability to raise capital sufficient to raise output and meet demand and the availability of labor in the vicinity. These witnesses may also

include sales capacity witnesses to establish that the patent owner had an adequate sales force and distributor network to have made the sales taken by the infringer.

§ 9:6.2 Use of a Damages Expert

[A] Selection of a Damages Expert

It is customary, in nearly all but the smallest damages cases, to use an expert witness to present opinion testimony explaining the basis for the bottom-line figure of patent damages claimed and to link it to the supporting foundational evidence by methodology consistent with proper accounting and economics principles and with leading Federal Circuit precedents. To play this crucial role, two main strains of damages expert witnesses have developed.

One strain constitutes accountant experts, typically from the litigation support groups of major accounting firms or from their spin-offs. The other strain constitutes economist experts, often from specialized damages consulting firms, sometimes supplemented by actual experience in marketing and sales. The line between the two tends to blur, as the litigation support teams from major accounting firms frequently include expert economists, while the economist-expert consulting firms frequently include CPAs.

Which type of damages expert should be chosen is to a considerable extent a matter of preference based on the successful past experiences of the litigating attorney. Some cases are better suited to an accountant-expert, for example, where the major damages issues involve technical accounting matters, such as the proper application of overhead in multiproduct enterprises. Other cases are better suited to an economist-expert, for example, where the predominant issues involve price elasticity and whether or not there are acceptable noninfringing substitutes.

In choosing a damages expert, it is vital to interview several candidates. Damages experts can be located in a variety of ways, for example, recommendations from other patent litigators; encounters in other litigation where they are assisting adversaries; their appearances on professional CLE programs; their published writings; and the mailings which regularly cross the desks of law firms engaged in patent litigation. Because patent litigation is viewed as a growth opportunity by damage-litigation witnesses whose experience has been entirely in nonpatent fields, such as general commercial litigation or antitrust litigation, some of those who are interviewed will fail the interviewing process for lack of understanding of or experience with the special character of patent damages expert testimony. The right candidate often does not emerge until there has been an exchange of views between the litigation attorney and each prospective damages
expert, because considerable discussion is needed to clarify the type of expertise best suited for the case at hand.

It is necessary that the damages expert possess the qualifications and experience to satisfy the standards therefor required under *Daubert v. Merrell Dow Pharmaceuticals, Inc.* However, it is not a ground for disqualification of a patent damages expert’s testimony that his reasonable royalty analysis relied on his resolution of a fact issue necessary to that analysis.

[B] Expert’s Team

The organization of the damages team put together by the patent damages expert, in any sizable case, involves backup personnel to the testifying expert in the form of a nontestifying consultant and one or more juniors.

The juniors on the patent damages expert team perform the very extensive work of cataloging or studying the usually voluminous document production associated with patent damages, including the data, the schedules, summaries, graphs, and bar charts that the testifying expert can utilize to create his or her expert report. Of course, to prepare that report and to testify convincingly at the trial and in a deposition, the testifying expert will need to become personally familiar with the underlying documents and witness testimony that support the documents created by the team.

While not every patent damages team will include one, a nontestifying consultant who complements the testifying expert witness can be a very helpful addition. Trial counsel can obtain expert accounting advice and a source of ideas not exposed to the same degree of discovery as the testifying expert.

[C] Protection of Attorney Work Product

Current patent damages case law tends to make any communication with the testifying expert and any documents shown to the testifying expert subject to discovery and outside the realm of the litigation attorney’s work product. This is not true of a nontestifying consulting witness. Sometimes difficult ideas and alternative number strategies can be worked out with a nontestifying consultant, and

109. *See Karn v. Ingersoll-Rand Co.*, 168 F.R.D. 633, 635 (N.D. Ind. 1996) [work product protection does not apply to documents provided by counsel to testifying experts related to matters of litigation]. *But cf. B.C.F. Oil Ref., Inc. v. Consol. Edison Co. of N.Y., Inc.*, 171 F.R.D. 57, 62 (S.D.N.Y. 1997) [documents having no relation to expert’s role as an expert need not be produced, but any ambiguity as to expert’s role must be resolved in favor of
unacceptable alternatives discarded, without ever having to reveal them to the testifying consultant, thus preserving the attorney’s work product protection for ideas considered but not used.

[D] Procedural Issues re Damages Evidence

It is necessary to qualify the damages expert to testify applying the Daubert methodology. An illustrative case is i4i Limited Partnership v. Microsoft Corp. The damages expert in that case used the services of a survey expert to survey what percentage of defendant Microsoft’s WORD XP customers were using that software in a manner that practiced the plaintiff’s patented custom XML routine embedded in WORD. Based on the expert’s report and the survey, the Federal Circuit affirmed a jury verdict for the plaintiff of $200 million. The Federal Circuit held that the jury could have found the expert’s evidence sufficient to support the award. The court did not entertain Microsoft’s arguments on appeal, attacking the award as “grossly excessive or monstrous,” because of its failure to file a pre-verdict JMOL attacking the sufficiency of the damages evidence under Rule 50(a) and (b) of the Federal Rules of Civil Procedure.

§ 9:6.3 Damages for Post-Verdict Sales

A patent infringement plaintiff, whose complaint requested “money damages sustained as a result of defendant’s infringement” without a temporal limit, and which requested “such other and further relief as the Court finds just and proper,” was entitled to an accounting for damages caused by the defendant’s post-verdict infringing sales.

§ 9:7 Effect of Bifurcation on Trial of Damages

The defendant in a patent action often moves to bifurcate trial of damages from trial of liability. Even where such motions are granted, the order granting bifurcation usually limits the bifurcation to the trial, permitting discovery of damages to be conducted during the discovery period. In that case, if the jury finds liability, the trial can proceed with little delay to trial of the damages issue and a final judgment.

party seeking discovery); Haworth, Inc. v. Herman Miller, Inc., 162 F.R.D. 289, 293 [W.D. Mich. 1995] [requiring disclosure of factual information considered by the expert witness but not relied upon, as well as information that was considered and relied upon by the witness].

110. i4i Ltd. P’ship v. Microsoft Corp., 598 F.3d 831, 852–54 [Fed. Cir. 2010].


Factors that may justify bifurcation with an accompanying stay in damages discovery include extremely complex damages, liability, or other issues, or a likelihood of defendant’s success on liability.\textsuperscript{112}

On the other hand, there are cases in which the bifurcation order stays damages discovery until after the liability verdict.\textsuperscript{113} In that case, after the verdict in the liability trial, there can be an appeal to the Federal Circuit,\textsuperscript{114} and in the event of a final judgment against the patentee, the proceedings can conclude without either discovery or trial of the damages issues. Courts are reluctant, however, to grant a bifurcation order that defers discovery of damages until after trial of liability. They know that excessively protracted litigation not only increases the overall expense for a successful plaintiff but also may reflect badly on the trial court’s case management record.\textsuperscript{115}

It has been argued that bifurcation that denies the patent owner the opportunity to have trial of damages before the same jury that tried the liability issue is an abridgement of the owner’s Seventh Amendment right to trial by jury. The prevailing view, however, is that, as long as liability and damages are tried as separate issues, bifurcation of liability and damages to two different juries does not violate the Seventh Amendment.\textsuperscript{116}

The patent owner should generally resist any motion to bifurcate brought by the defendant. One of the advantages built into being a patent plaintiff in an unbifurcated case is the opportunity to close the plaintiff’s opening case with a powerful presentation on damages. Properly presented, damages should engage the interest of the jurors in finding for the plaintiff. Moreover, because the damages issue is the

\textsuperscript{112} F&G Scrolling Mouse, LLC v. IBM Corp., 190 F.R.D. 385, 395 (M.D.N.C. 1999) [denying motion to bifurcate trial and to stay discovery of the willfulness and damages issues where the above-mentioned factors were absent].


\textsuperscript{114} See 28 U.S.C. § 1292(c)(2) (“The United States Court of Appeals for the Federal Circuit shall have exclusive jurisdiction— . . . [2] of an appeal from a judgment in a civil action for patent infringement which would otherwise be appealable to the United States Court of Appeals for the Federal Circuit and is final except for an accounting.”].


last part of the plaintiff’s case that the jury has heard, the defendant begins its case with the uphill task of dispelling an impression that there must be liability—how else could the damages be so large? The defendant indeed faces a difficult task when this impression is added to the already heavy burdens of attacking the validity of the patent by clear and convincing evidence and dispelling the plaintiff’s infringement presentation by a preponderance of the evidence. Additionally, there is the factor of juror fatigue. A jury that has spent several weeks determining liability is not eager to spend more weeks on trial of damages. For these reasons, it will rarely, if ever, be in the patent owner’s interest to favor a bifurcated trial on liability followed by trial of damages.

§ 9:8 Demonstrative Exhibits

The trial of the damages phase of the case almost always involves a presentation of mathematical calculations and accounting concepts which many jurors are unfamiliar with and may find difficult to follow. Also, the derivation of the basic damages numbers, for example, as total sales, allocated overhead, direct labor, materials cost, depreciation, gross profit, and so on, from masses of documents customarily involves presentation of data by summaries compiled from extensive document sources. The presentation of this data, the performance of the calculations, and the relationship of these core figures to the sources of data from which they came are all greatly simplified and aided by demonstrative exhibits including graphics.

These graphics include graphs, bar charts, pie charts, and simplified financial statements. They can be supplemented with more imaginative graphics that present the underlying concepts with pictures appropriate to the technology, cartoons, color coding, and other visual imagery. In devising persuasive demonstrative exhibits, an experienced damages expert firm (often with its own internal graphics department) can be particularly helpful.

§ 9:9 Prejudgment Interest

Under 35 U.S.C. § 284, the court is authorized to fix and award interest in the judgment. At the trial court’s discretion, a plaintiff may be awarded interest from a time prior to the judgment, from a date when a royalty should have been paid, in order to provide what is deemed full compensation to the patent owner.

Current awards of prejudgment interest are based on doctrine originating out of General Motors Corp. v. Devex Corp.117 In Devex,

the Supreme Court overturned the standard of awarding interest only in cases of bad faith or exceptional circumstances, and reasoned that policy interests require that "prejudgment interest should ordinarily be awarded where necessary to afford the plaintiff full compensation for the infringement." Such an award is entirely under the court's discretion, and no statutory guidelines are presented for granting or denying interest awards. The Federal Circuit has frequently reversed the denial of prejudgment interest awards, following a policy of compensating the plaintiff.\footnote{Hughes Tool Co. v. Dresser Indus., Inc., 816 F.2d 1549, 1559–60, 2 U.S.P.Q.2d 1396 (Fed. Cir.), cert. denied, 484 U.S. 914, 108 S. Ct. 261 (1987).}

While Devex dealt with prejudgment interest on reasonable royalties, and made no mention of lost profits calculation, the Federal Circuit has stated that such awards should apply equally to interests on lost profits.\footnote{Gyromat Corp. v. Champion Spark Plug Co., 735 F.2d 549, 556, 222 U.S.P.Q. 4 (Fed. Cir. 1984).}

Prejudgment interest may be applied only to the primary or actual damages portion of the judgment, and not to any enhanced or punitive portion of the judgment.\footnote{Underwater Devices, Inc. v. Morrison-Knudsen Co., 717 F.2d 1380, 1389, 219 U.S.P.Q. 569 (Fed. Cir. 1983).} Further, the interest should be calculated on the basis of damages on yearly sales, and not on the entire amount of damages from the date the infringement began.\footnote{Dragan v. L.D. Caulk Co., 12 U.S.P.Q.2d 1081 [D. Del. 1989], aff’d, 897 F.2d 538 (Fed. Cir. 1990).} The interest rate calculation is at a statutory rate or higher \{based on a proper showing\}, at the court’s discretion. Typical rates that the courts have applied include the prime rate, the U.S. Treasury bill rate, and the rate the patentee has actually paid for borrowed funds. The default rate for prejudgment interest, in the absence of any other rate affirmatively demonstrated as more appropriate, is the prime rate.\footnote{Calabrese v. Square D Co., Case No. 97 C 2199, 2000 U.S. Dist. LEXIS 4307, at *23 [N.D. Ill. Mar. 23, 2000] (mem.); Gorstein Enters., Inc. v. Quality Care-USA, Inc., 874 F.2d 431, 436–37 (7th Cir. 1989).} Interest may be uncompounded or compounded at annual, monthly, daily, or variable rates.

§ 9:10 Increased Damages

§ 9:10.1 Willfulness and Who Determines It

35 U.S.C. § 284 provides for the increase of damages of up to three times the amount found, at the discretion of the court. While the
statute does not state the basis on which damages may be increased, it is established by the case law that an increase may be ordered where the infringement is found to have been “willful.”\textsuperscript{123} The standard of proof for willfulness is clear and convincing evidence.\textsuperscript{124} Proof of willfulness requires clear and convincing evidence. A finding of willfulness generally requires copying. However, “slavish copying” is not required.\textsuperscript{125}

In a jury-tried case, the finding whether the infringement was willful is a finding of fact to be made by the jury on a special interrogatory.\textsuperscript{126} Subsequently, the Federal Circuit has refined its analysis to hold that “the objective determination of recklessness, even though predicated on underlying mixed questions of law and fact, is best decided by the judge as a question of law subject to de novo review.”\textsuperscript{126.1} In a bench-tried case, the determination will be made by the court. A finding of willfulness by the jury does not compel an increase of damages because other factors may be considered by the court in exercising its discretion.\textsuperscript{127}

\section*{§ 9:10.2 Willfulness = Objective Recklessness}

In 2007 the Federal Circuit made a major change in the law of enhanced damages by overruling a twenty-four-year-old precedent, \textit{Underwater Devices, Inc. v. Morrison-Knudsen Co.}.\textsuperscript{128} That case had imposed an affirmative duty on a defendant to obtain an opinion of counsel that it would not incur liability for infringement of a known patent before commencing its accused activities. In its new 2007

\begin{enumerate}
\item Stryker Corp. v. Intermedics Orthopedics, Inc., 96 F.3d 1409, 1413, 40 U.S.P.Q.2d 1065 [Fed. Cir. 1996].
\item Arachnid, Inc. v. Merit Indus., Inc., 939 F.2d 1574, 1577, 19 U.S.P.Q.2d 1513 [Fed. Cir. 1991] [court submitted special interrogatories to jury on issue of willfulness]; Nat’l Presto Indus., Inc. v. W. Bend Co., 76 F.3d 1185, 1189, 37 U.S.P.Q.2d 1685 [Fed. Cir. 1996] [jury found by special verdicts that there was not literal infringement, but that there was infringement under the doctrine of equivalents].
\item Bard Peripheral Vascular, Inc. v. W.L. Gore & Assoc., Inc., 682 F.3d 1003, 1007 [Fed. Cir. 2012].
\item Cybor Corp. v. FASTechs., Inc., 138 F.3d 1448, 1461, 46 U.S.P.Q.2d 1169 [Fed. Cir. 1998] [trial court’s denial of enhanced damages despite a showing of willfulness was not an abuse of discretion]; Juicy Whip, Inc. v. Orange Bang, Inc., 382 F.3d 1367, 72 U.S.P.Q.2d 1385 [Fed. Cir. 2004].
\item Underwater Devices, Inc. v. Morrison-Knudsen Co., 717 F.2d 1380 [1983].
\end{enumerate}
case, In re Seagate Technology, LLC, the Federal Circuit concluded that the Underwater Devices willfulness standard was no longer consistent with Supreme Court precedent for willfulness and held as follows:

Accordingly, we overrule the standard set out in Underwater Devices and hold that proof of willful infringement permitting enhanced damages requires at least a showing of objective recklessness. Because we abandon the affirmative duty of due care, we also reemphasize that there is no affirmative obligation to obtain opinion of counsel.

The Federal Circuit further explained the “objective recklessness” standard for patent cases:

Accordingly, to establish willful infringement, a patentee must show by clear and convincing evidence that the infringer acted despite an objectively high likelihood that its actions constituted infringement of a valid patent. See Safeco, 127 S. Ct. at 2215 (“It is [a] high risk of harm, objectively assessed, that is the essence of recklessness at common law.”). The state of mind of the accused infringer is not relevant to this objective inquiry. If this threshold objective standard is satisfied, the patentee must also demonstrate that this objectively-defined risk (determined by the record developed in the infringement proceeding) was either known or so obvious that it should have been known to the accused infringer. We leave it to future cases to further develop the application of this standard.

Thus, the court has now stated that “the state of mind of the accused infringer is not relevant to this objective inquiry.” However, where an opinion of counsel is proffered in the future, it will presumably [in this writer’s expectation] be assessed from the standpoint whether the opinion provided a basis for a reasonable reader of the opinion to have relied upon it to proceed.

It is important to note that the court did not hold that the failure of a defendant to seek an opinion concerning infringement must be eliminated from the evidence that can be placed before a jury as part of the totality of the circumstances in determining willfulness.

130. Id. at 1371.
131. Id.
There are already precedents bearing on the willfulness issue that did not turn on the possession or lack of possession of a written opinion or the indicia of reliability that an opinion must possess to exclude willfulness.\footnote{133}{See \textit{Ryco, Inc. v. Ag-Bag Corp.}, 857 F.2d 1418, 1428–29, 8 U.S.P.Q.2d 1323 [Fed. Cir. 1998] (company’s knowledge of competitor’s patents, and lack of prudent consultation with counsel, gave rise to willfulness); \textit{Kloster Speedsteel AB v. Crucible, Inc.}, 793 F.2d 1565, 1579, 230 U.S.P.Q. 81, 231 U.S.P.Q. 160 [Fed. Cir. 1986] (although not always dispositive, failure to seek advice of counsel concerning known competitor’s patents constituted willfulness here); \textit{Union Carbide Corp. v. Tarancon Corp.}, 742 F. Supp. 1565, 1576–77, 15 U.S.P.Q.2d 1833 [N.D. Ga. 1990] (despite clear knowledge of plaintiff’s patent, defendant held a good-faith belief that his patent was not infringing, so there was no willfulness); \textit{ADC Telecomm., Inc. v. Siecor Corp.}, 954 F. Supp. 820, 834 [D. Del. 1997] (if internal documents show awareness of patent, there is knowledge to trigger a duty not to infringe); \textit{Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings}, 370 F.3d 1354, 71 U.S.P.Q.2d 1081 [Fed. Cir. 2004] (license to defendant from a third party which specifically excluded plaintiff’s patent triggered duty to investigate infringement).}

\section*{§ 9:10.3 Judicial Discretion on Enhancement}

The statute places increase of damages in the discretion of the trial court. However, after a jury has made a finding of willfulness, it can be an abuse of discretion for the trial court to deny any enhancement of damages, without explanation.\footnote{134}{\textit{Jurgens v. CBK, Ltd.}, 80 F.3d 1566, 1571–73, 38 U.S.P.Q.2d 1397 [Fed. Cir. 1996]; \textit{Transclean Corp. v. Bridgewood Servs., Inc.}, 290 F.3d 1364, 62 U.S.P.Q.2d 1865 [Fed. Cir. 2002] (sustaining discretion of trial judge to decline to enforce damages, after jury finding of willfulness, where trial court had carefully considered the factors bearing on its exercise of discretion); \textit{Riles v. Shell Exploration & Prod. Co.}, 298 F.3d 1302, 63 U.S.P.Q.2d [Fed. Cir. 2002] (despite evidence of copying, trial court’s denial of increase of damages was affirmed since issues were close and jury could have found for infringer).}

Furthermore, the exercise of discretion does not require the district court to automatically increase the damages by the maximum amount of three times. A district court has tabulated nine factors identified in the Federal Circuit’s jurisprudence as bearing on the degree of enhancement.\footnote{135}{\textit{Advanced Cardiovascular Sys., Inc. v. Medtronic, Inc.}, 265 F.3d 1294, 60 U.S.P.Q.2d 1161 [Fed. Cir. 2001]. \textit{See also NTP, Inc. v. Research in Motion Ltd.}, 270 F. Supp. 2d 751, 67 U.S.P.Q.2d 1594 [E.D. Va. 2003].} Following a jury verdict of willfulness, the trial judge increased damages by only one third, listing the following nine factors:

\begin{enumerate}
\item See \textit{Ryco, Inc. v. Ag-Bag Corp.}, 857 F.2d 1418, 1428–29, 8 U.S.P.Q.2d 1323 [Fed. Cir. 1998] (company’s knowledge of competitor’s patents, and lack of prudent consultation with counsel, gave rise to willfulness); \textit{Kloster Speedsteel AB v. Crucible, Inc.}, 793 F.2d 1565, 1579, 230 U.S.P.Q. 81, 231 U.S.P.Q. 160 [Fed. Cir. 1986] (although not always dispositive, failure to seek advice of counsel concerning known competitor’s patents constituted willfulness here); \textit{Union Carbide Corp. v. Tarancon Corp.}, 742 F. Supp. 1565, 1576–77, 15 U.S.P.Q.2d 1833 [N.D. Ga. 1990] (despite clear knowledge of plaintiff’s patent, defendant held a good-faith belief that his patent was not infringing, so there was no willfulness); \textit{ADC Telecomm., Inc. v. Siecor Corp.}, 954 F. Supp. 820, 834 [D. Del. 1997] (if internal documents show awareness of patent, there is knowledge to trigger a duty not to infringe); \textit{Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings}, 370 F.3d 1354, 71 U.S.P.Q.2d 1081 [Fed. Cir. 2004] (license to defendant from a third party which specifically excluded plaintiff’s patent triggered duty to investigate infringement).}
\item \textit{Jurgens v. CBK, Ltd.}, 80 F.3d 1566, 1571–73, 38 U.S.P.Q.2d 1397 [Fed. Cir. 1996]; \textit{Transclean Corp. v. Bridgewood Servs., Inc.}, 290 F.3d 1364, 62 U.S.P.Q.2d 1865 [Fed. Cir. 2002] (sustaining discretion of trial judge to decline to enforce damages, after jury finding of willfulness, where trial court had carefully considered the factors bearing on its exercise of discretion); \textit{Riles v. Shell Exploration & Prod. Co.}, 298 F.3d 1302, 63 U.S.P.Q.2d [Fed. Cir. 2002] (despite evidence of copying, trial court’s denial of increase of damages was affirmed since issues were close and jury could have found for infringer).}
\end{enumerate}
§ 9:10.4 Privilege and Disqualification

The Federal Circuit had held in 1988 that refusal to produce an opinion of counsel letter during discovery justifies an inference that the opinion was adverse to the defendant. In 2004, the Federal Circuit overruled this precedent in Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dann Corp., holding that a negative inference of willful intent is not to be drawn as an inference of law from invocation of privilege to refuse to produce an opinion of counsel obtained by the alleged infringer. Nor is it proper to draw an adverse inference of willful infringement merely for failure to obtain an opinion of counsel. However, the Federal Circuit left standing an affirmative duty to exercise due care imposed on a person who has actual notice of another’s patent rights to exercise due care to determine whether or not he is infringing. Even after Knorr-Bremse, its reaffirmation of the duty of care continues to place the defendant in a dilemma—either produce the opinion letter and waive privilege that extends beyond the letter itself, or invoke the privilege and risk enhanced damages if liability for infringement is found at trial. Moreover, if the opinion was rendered by the same attorney who is trial

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137. Fromson v. W. Litho Plate & Supply Co., 853 F.2d 1568, 1572–73, 7 U.S.P.Q.2d at 1606 (Fed. Cir. 1988) (when infringer refuses to introduce an opinion letter, court is free to infer either that no opinion letter was obtained or that opinion was adverse to infringer).
counsel, production of the opinion may open the door to a motion for
disqualification of trial counsel as a potential witness at the trial.

In In re Seagate Tech., LLC, the Federal Circuit directly ad-
dressed the problems of protecting the privilege of trial counsel’s
communications with the client and his or her work product after
the client has produced an opinion from separate opinion counsel
relied upon to refute willfulness. The Seagate court acknowledged that
its change to a new basis of willfulness required a different analysis
because opinions of opinion counsel and trial counsel have “signifi-
cantly different functions,” distinguished as follows: “Whereas opinion
counsel serves to provide an objective assessment for making informed
business decisions, trial counsel focuses on litigation strategy and
evaluates the most successful manner of presenting a case to a judicial
decision maker.”

Based on these significant differences in function, the court con-
cluded that “fairness counsels against disclosing trial counsel’s
communications on an entire subject matter in response to an accused
infringer’s reliance on opinion counsel’s opinion to refute a willfulness
allegation.”

The court buttressed its reasoning with other considerations: that
the demands of our adversarial system of justice will far outweigh any
benefits of extending waiver to trial counsel, and that because willful infringement in the main must find its basis in
prelitigation conduct, communications with trial counsel have little
if any relevance justifying disclosure. Interestingly the court sug-
gested that where an infringer’s post-filing conduct is asserted to be
reckless, a patentee who fails to seek, or obtain, a preliminary injunc-
tion should be barred from enhanced damages based solely on the
infringer’s post-filing conduct. Ultimately, the court held as follows:

In sum, we hold, as a general proposition, that asserting the
advice of counsel defense and disclosing opinions of opinion
counsel do not constitute waiver of the attorney-client privilege
for communications with trial counsel. We do not purport to
set out an absolute rule. Instead, trial courts remain free to
exercise their discretion in unique circumstances to extend waiver
to trial counsel, such as if a party or counsel engages in

140. Id. at 1373.
141. Id.
142. Id.
143. Id. at 1374.
144. Id.
145. Id.
The Federal Circuit also considered whether an advice-of-counsel defense against willfulness might also implicate a waiver of trial counsel’s work product protection. The court, citing precedent, stated that “factual work product can be discovered solely upon a showing of substantial need and undue hardship and that the mental process work product of trial counsel is afforded even greater, nearly absolute protection.”\(^{146}\) It found that waiver was “quite limited” by precedent and concluded as follows:

Accordingly, we hold that, as a general proposition, relying on opinion counsel’s work product does not waive work product immunity with respect to trial counsel. Again, we leave open the possibility that situations may arise in which waiver may be extended to trial counsel, such as if a party or his counsel engages in chicanery.\(^{147}\)

Finally, the court pointed out that the work product protection was not limited to trial counsel’s files but also protected nontangible work product, which could not be discovered by deposition of the trial attorneys.\(^{148}\)

The Seagate court has placed much emphasis upon the importance of protecting trial counsel from invasion of his or her privileged communications with the client or his or her work product in order to preserve the vitality of the adversary process. This emphasis suggests that a motion to disqualify defendant’s trial counsel, on the grounds that he or she may be needed as a witness to discredit any opinion that his or her client is relying on, may now become unattainable except in the rare case exhibiting “chicanery.”

\section*{§ 9:10.5 Requirements for Opinion Adequacy}

Although the Seagate court has dispensed with the affirmative duty to obtain an opinion of counsel to rebut willfulness and declared the mental state of the infringer irrelevant, it is foreseeable that some defendants will still rely on an opinion of opinion counsel to refute willfulness on the ground that an objective reader of the opinion would have been justified in proceeding. The Seagate opinion does not overrule prior cases that delineate requirements for adequacy of an opinion to refute willfulness, notably in the respects of competence, comprehensiveness, and timeliness.

\begin{footnotes}
\item[146.] Id. at 1375.
\item[147.] Id. at 1376.
\item[148.] Id.
\end{footnotes}
[A] Competence and Comprehensiveness

In general, the opinion should be a written opinion, since written opinions are viewed more favorably than oral opinions (which, nonetheless, have occasionally been accepted).149 The person rendering the opinion should be a registered U.S. patent attorney rather than a general attorney.150 However, in at least one case, an opinion of a foreign qualified patent practitioner has been sufficient.151 It is also preferable that the opinion should have been rendered by outside counsel rather than in-house patent counsel.152 However, in appropriate circumstances, an in-house patent counsel opinion can be adequate to avoid willfulness.153 The opinion of a nonlawyer is almost never adequate.154

The competence of the opinion should also be apparent from the opinion itself in terms of the matters considered. It must include, at a minimum, discussions of the accused device, composition, or method; the patent-in-suit; the prosecution history of the patent; the cited prior art; and any other pertinent prior art known to the renderer of the opinion.155

On invalidity defenses, all relevant elements of the defense should be discussed. For example, where a defense of obviousness is relied on, failure to evaluate objective evidence of nonobviousness in the opinion letter can render it incompetent.156 Every claim of the patent should be referred to, both for literal infringement and for infringement by the doctrine of equivalents.157 Any other defenses that are supported on the facts known to the accused should also receive attention, such as inequitable conduct by the patent owner, lack of an enabling disclosure, failure to disclose the best mode, patent misuse, intentional

157. Westvaco Corp., 991 F.2d at 744 (opinion letter is competent if it discusses patent claims individually and opinion letter that omits discussion of equivalents will survive only if it has enough other indicia of competence).
misjoinder or nonjoinder of inventors, and so on. In many situations, the facts of some of these defenses will be unknown to the infringer before litigation has commenced, at which time they arrive too late to be part of the original opinion of counsel relied on to defeat willfulness.

A competent opinion should also address the question of which party bears the burden of proof. As discussed elsewhere in this book, the patent owner bears the burden of proof of infringement by the standard of a preponderance of the evidence and a potential infringer bears the burden of proof of invalidity by the standard of clear and convincing evidence.

A difficult question is how to deal with equivocal issues. While an opinion should reach a reasoned conclusion coming down on one side or the other of an issue, the Federal Circuit has recognized that equivocation in an opinion does not require a finding of willfulness. Indeed, an opinion’s failure to recognize that the outcome on a particular issue may be subject to some uncertainty (for example, on whether the trier of fact will find clear and convincing evidence of an intent to deceive in an inequitable conduct defense) would tend to detract from, rather than enhance, the credibility of the opinion.

[B] Timeliness

The timeliness of the opinion can be an important consideration in relation to the time that the infringement began and the time that the infringer gained its knowledge of the potential infringement. It seems clear that where the accused infringer had knowledge of the patent before the infringement commenced and copied the patented product deliberately without any respect for the patent, willfulness will be found.

More difficult questions of timeliness arise in the context of an infringer that commenced its infringement before the patent had issued or during the term of the patent without knowledge of it. In those circumstances, the question of timeliness must focus upon the speed with which the defendant reacted after it did learn of the patent to assess whether or not it was infringing valid patent rights. Some delay is permissible, provided that it was not unreasonable.

However, a delay that is unreasonable because of its excessive length or lack of diligence can undermine the opinion.

§ 9:11 Award of Attorney Fees

The patent statute provides that “[t]he court in exceptional cases may award reasonable attorney fees to the prevailing party.”

Exceptional cases usually involve bad faith litigation, fraud, or inequitable conduct by the patentee in procuring the patent. Where the prevailing party is the patent owner, the circumstances that make a case exceptional for the award of attorney fees generally align with those that would justify increased damages, namely willful infringement. Where the court denies attorney fees in spite of an express finding of willful infringement, the court must explain why the case is not “exceptional.”

The factors justifying a holding of willfulness have already been discussed. Since attorney fees are available to a “prevailing party” in the court’s discretion, they are also available to a defendant accused of infringement where the patent owner’s conduct was in bad faith in bringing the action. Attorney fee awards to defendants, which are rare, usually involve enforcement of a patent procured by fraud on the Patent and Trademark Office. The bringing of a patent infringement suit without any reasonable basis for contending infringement can also

162. [Reserved.]
165. S.C. Johnson & Son, Inc. v. Carter-Wallace, Inc., 781 F.2d 198, 201, 228 U.S.P.Q.2d 1481 (Fed. Cir. 1986) (remanding case where, with a finding of willful infringement, district court denied attorney fees without offering any other findings to enable review of denial); but see Consol. Aluminum Corp. v. Foseco Int’l, Ltd., 910 F.2d 804, 814, 15 U.S.P.Q.2d 1481 (Fed. Cir. 1990) (where record is replete with undisputed facts that unequivocally support denial of attorney fees, district court is not required to explain its denial); Special Devices, Inc. v. OEA, Inc., 270 F.3d 1353, 60 U.S.P.Q.2d 1537 (Fed. Cir. 2001) [appeal of award of attorney fees is premature before amount has been adjudged].
166. See section 9:10.1.
be the basis for an award of attorney fees to a prevailing defendant.168 A party who has entered into an agreement settling a patent lawsuit is not a “prevailing party” as required for recovery of its attorney fees and costs.169

The conduct that can give rise to exercise of the court’s discretion to award attorney fees can also be improper conduct of the litigation itself.170 However, the Federal Circuit has declined to “expand the scope of the statutory term ‘exceptional’” to cover a patent owner’s “bad faith business conduct toward an infringer prior to litigation.”171 The district court’s finding of equitable estoppel against the patent owner, who had deceived the defendant into infringing, did not provide basis for attorney fees under the “exceptional cases” provision.172

When an attorney-fee award is made, the party seeking the award is obligated to show the reasonable character of the amount sought. This will normally require a fully documented showing of the time records of the attorneys concerned. Typically, the awarding court may reduce the amount sought for various reasons such as the elimination of excessive time spent on particular items, overlapping billings, and the use of hourly charge rates which are higher than those customarily charged.173 Section 285 does not provide for an award of expert witness fees, above the daily amount provided for the attendance of any witness at trial under 28 U.S.C. § 1821(b).174

Claims for attorney fees in patent cases are most commonly brought under the “exceptional case” basis of 35 U.S.C. § 285. Occasionally a claim for attorney fees is asserted on the different basis of 28 U.S.C. § 1927, that the losing attorney had multiplied the proceedings in the case “unreasonably and vexatiously.” In a patent case in which a section 1927 basis for attorney fees was asserted, the Federal Circuit, applying Second Circuit precedent interpreting section 1927, ruled that application of this section requires the trial

172. Id.
court to make specific findings of fact evidencing the subjective bad
faith of the attorney whose conduct is at issue.\footnote{175}

In 2014, the Supreme Court cleared away some limitations that the
Federal Circuit had encrusted upon the freedom of district courts to
determine whether or not a case amounted to an “exceptional case”
justifying an award of attorney fees. In one of two cases decided on
the same day,\footnote{175.1} \textit{Octane Fitness, LLC v. ICON Health \\
& Fitness, Inc.},\footnote{Id. at 1756.} the Court overruled a Federal Circuit limitation that exceptionality
required a showing that the litigation was objectively baseless and
brought subjectively in bad faith and, further, that the showing must
be by clear and convincing evidence. Instead, the Supreme Court held,
an exceptional case is “one that stands out from others with respect
to the substantive strength of a party’s litigating position (consider-
ing both the governing law and the facts of the case) or with the
unreasonable manner in which the case was litigated.”\footnote{175.2} Further,
proof requires only the normal preponderance-of-evidence standard
of civil and patent litigation. In the other case,\footnote{175.3} \textit{Highmark Inc. v. Al-
lcare Health Management System},\footnote{Forest Grp., Inc. v. Bon Tool Co., 590 F.3d 1295 (Fed. Cir. 2009).} the Court held that the
award of attorney fees under section 285 for an exceptional case was
discretionary with the trial court and, further, that review of an
exceptional case award should be for abuse of discretion and should
not be de novo.

\section{§ 9:12 False Marking}

\subsection{§ 9:12.1 Under 1952 Act}

Section 292(a) of the 1952 patent act provided for a fine of not more
than $500 for each offense by anyone who marks any unpatented
article with the word “patent,” or any word or number importing that
it is patented, for the purpose of deceiving the public. Subsection (b)
provided a \textit{qui tam} basis for suit: “any person” may sue for the penalty,
and the penalty amount shall be divided equally between the plaintiff
and the U.S. government.

Application of this section had been infrequent for decades. In
2009, the Federal Circuit had a case in which to interpret the term “for
each offense.”\footnote{Forest Grp., Inc. v. Bon Tool Co., 590 F.3d 1295 (Fed. Cir. 2009).} This term had been applied in earlier, pre-Federal
Circuit case law to each decision or instance which resulted in a run of falsely marked products or to each time period during which false marking occurred. The Federal Circuit ruled that “Section 292 clearly requires a per article fine.” 177

The court also addressed the issue of proof of intent to deceive by the patent marker:

A party asserting false marking must show by a preponderance of the evidence that the accused party did not have a reasonable belief that the articles were properly marked. An assertion by a party that it did not intend to deceive, standing alone, “is worthless as proof of no intent where there is knowledge of falsehood.” 178

The holding in Forest Group that the penalty would be applied on a per article basis sparked a flood of qui tam actions, many involving high-volume, low-price items. One case involved plastic hot drink cup lids, marked with the numbers of two patents, which continued to sell in the multiple billions of units after the patents expired. 179 The Federal Circuit affirmed the lower court’s denial of the penalty because the patentee successfully rebutted the inference of intent resulting from false marking and the patentee’s knowledge of the falsity. The court observed that the presumption of intent to deceive is weaker where the false markings are expired patents that previously covered the marked products. The court noted that there was a business explanation, namely that the molds for making the lids were very expensive and the patent numbers were part of the molds, and that there was a desire to use the molds until the end of their working life when they would be replaced with unmarked molds. Further, the patentee had obtained legal advice from its patent counsel that there should not be a problem if it waited until the molds were worn out before replacing them with molds lacking the marking. Also, the court emphasized that the packaging for the lids advised that the lids “may be covered” by one or more of the listed patents and provided the consumer with an address to contact for information on the coverage question. In the light of this evidence, the court agreed with the trial court that the patentee had negated any inference of intent to deceive the public.

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177. Id. at 1302.
178. Id. at 1300 [citations omitted].
179. Pequignot v. Solo Cup Co., 608 F.3d 1356 (Fed. Cir. 2010).
§ 9:12.2 Under 2011 Act

Section 16 of the America Invents Act (AIA)\(^{180}\) made amendments to 35 U.S.C. § 292 that are expected to return the section to its previous quiescent state. Those amendments “apply to all cases, without exception, that are pending on, or commenced on or after, the date of enactment of this Act [September 16, 2011].” The substantive amendments which drain the incentive for adverse parties to invoke the marking section include:

- Only the United States may now sue for the penalty authorized by section 292(a).\(^{181}\)
- False marking of a product will not be a violation if the marking relates “to a patent that covered that product but has expired.”\(^{182}\)

Section 16 does establish a right to file a civil action for damages in federal district court for any person “who has suffered a competitive injury” from the false marking, “for recovery of damages adequate to compensate for the injury.”\(^{183}\) However, the twin difficulties of proof that (1) the false marking was made with intent to deceive, as required by Pequignot v. Solo Cup Co.,\(^ {184}\) and (2) a causal link between the false marking and the quantum of damages claimed, coupled with the difficulties of satisfying Rule 11 of the Federal Rules of Civil Procedure, seem likely to provide a curb on use of this civil action.

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181. 35 U.S.C. § 292(a) [AIA].
182. 35 U.S.C. § 292(c) [AIA].
183. 35 U.S.C. § 292(b) [AIA].
184. Pequignot, 608 F.3d 1356.