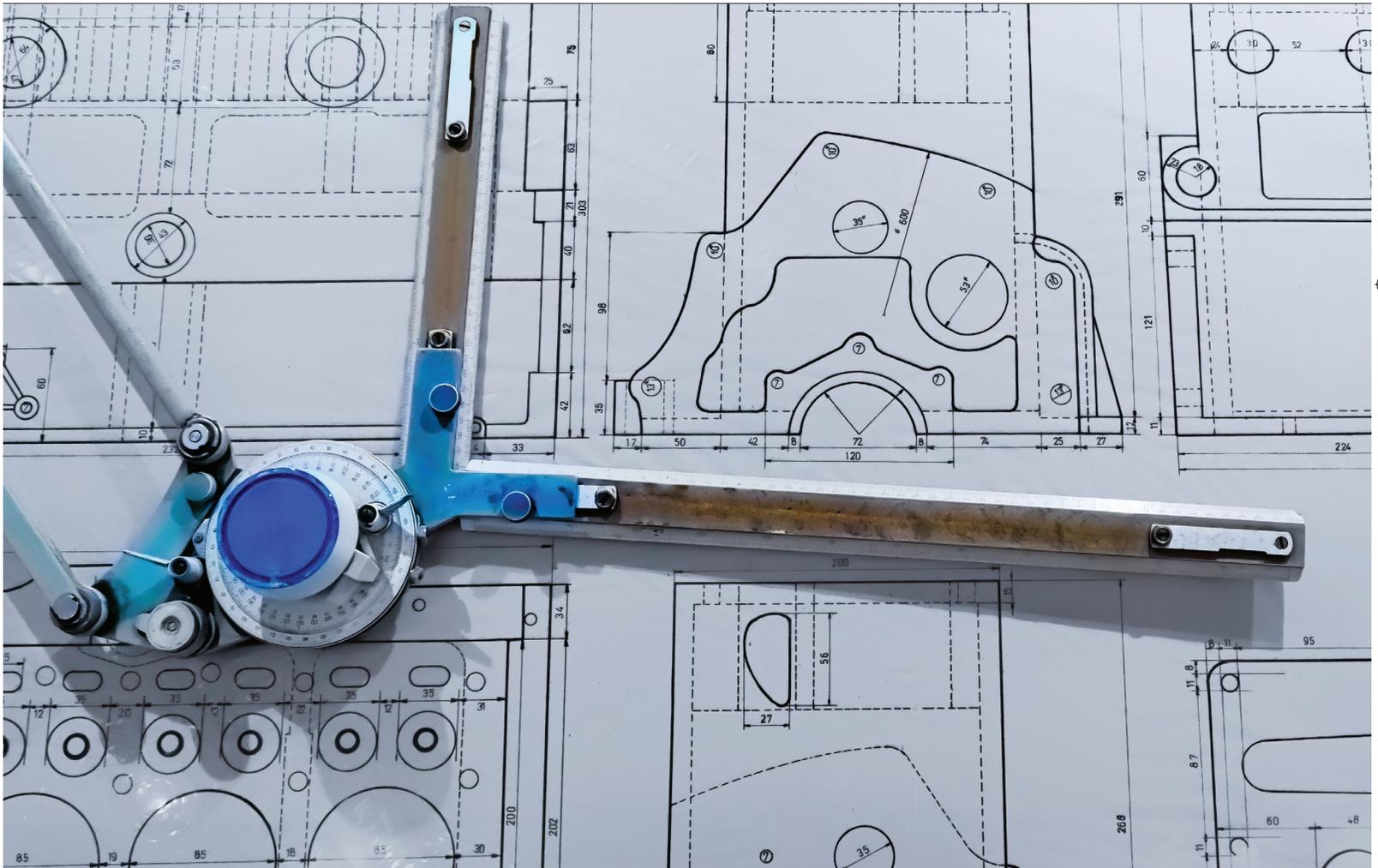




Damages for Patent Infringement:

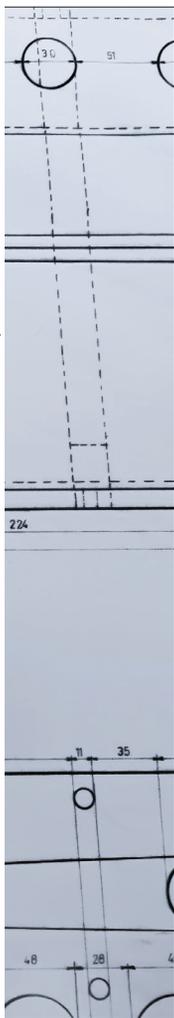
Securing an Award that Sticks

By knowing the current law on damages determinations in patent infringement cases, lawyers can maximize the likelihood that patent-holder clients' damages awards will not be reduced on appeal.





BY MARIANNE LEY HAYEK



Protection of intellectual property is a right enshrined in the U.S. Constitution.¹ The founders recognized that patents provide incentives for organizations and individuals to engage in research and development, which promotes technological advances and economic growth. Society benefits because technological progress is a key to rising living standards.

Although technology giants such as Samsung, Qualcomm, Intel, and Apple have reaped tremendous profits from their patented technology (and redefined modern computing and telecommunications with their inventions), many patents are issued to non-practicing entities (NPEs): inventors that do not manufacture or sell their patented technology. One prominent NPE is the Wisconsin Alumni Research Foundation (WARF), which is the dedicated patenting and licensing organization for the University of Wisconsin-Madison (UW-Madison). WARF has acquired more than 3,000 patents for inventions by UW-Madison faculty and researchers and, like all NPEs, claims the same intellectual property rights and protections as manufacturers; the patent holder has the right to exclude others from the manufacture, use, or sale of the patented invention.

Basics of Damages for Infringed Patents

Patent infringement occurs when an individual or a firm uses the patented technology without permission or compensation to the patent holder. Damages from patent infringement must be “adequate to compensate for

the infringement, but in no event less than a reasonable royalty, for use made of the invention by the infringer.”² Lost profits (the profits the patent holder would have earned had it, instead of the infringer, sold the product) might be relevant as a measure of damages for inventors who also manufacture and sell products containing the patented technology. When the patent holder is an NPE, it is still entitled to a reasonable royalty on the infringing sales. Even for plaintiffs that are practicing entities, reasonable-royalty damages are awarded more than three times more frequently than lost-profits damages.³

With the rise in patent infringement litigation against firms selling multi-featured products (such as smartphones and computers) that contain both patented and unpatented components, parties should take note of the U.S. Supreme Court’s warning in the 1884 *Garretson v. Clark* case: the plaintiff “must in every case give evidence tending to separate or apportion the defendant’s profits and the patentee’s damages between the patented feature and the unpatented features....”⁴ The U.S. Court of Appeals for the Federal Circuit has reiterated the need to account for patented and unpatented features of the infringing product unless the patented technology is the basis for demand for the entire product.⁵

This article explains the need for apportionment in the context of royalty damages in patent infringement cases and offers specific methods to avoid claiming damages on non-infringing components.

SUMMARY

Intellectual property protection is rooted in the U.S. Constitution. As with most constitutional matters, the details of the protection are ever evolving and must be worked out by individuals and entities, with the oversight of governmental agencies and courts.

Patents are a frequent source of disputes, especially because many patents are issued to inventors that do not manufacture or sell their patented technology. The patent holder can exclude others from the manufacture, use, or sale of the patented invention. Patent infringement occurs when an individual or a firm uses the patented technology without permission or compensation to the patent holder.

This article focuses on damages in patent infringement cases. Different formulas for determining damages can result in vastly different awards, and courts can refuse to uphold awards that they consider excessive. All parties in infringement cases benefit if the damages calculation is based on sound economic principles and is consistent with guidelines presented in recent court decisions.



Georgia-Pacific Factors

Royalty damages are typically calculated using a royalty rate that is determined by a court or jury and then multiplied by a royalty base consisting of the infringing sales. (Both sides typically argue for a reasonable royalty rate and royalty damages are ultimately calculated based on the rate determined by the judge or jury.) The royalty base could be the number of units the infringer sold (in which case the rate would be a dollar amount per unit) or the infringer's sales revenues, which would apply to a royalty rate expressed as a percent.

Since 1970, the so-called *Georgia-Pacific* factors have provided a framework for determining royalty rates in patent infringement cases. It is assumed that the parties engaged in a hypothetical negotiation in which the patent holder and the infringer were "reasonably and voluntarily trying to reach an agreement"⁶ and that the hypothetical negotiation took place just before the infringement occurred. The other *Georgia-Pacific* factors inform the relative bargaining positions of the parties.⁷ Of course, if the patent holder has a history of licensing its technology covered by the patent (the first *Georgia-Pacific* factor),

the established royalty from those previous license agreements will most likely be used in the damages calculation. See sidebar: 15 *Georgia-Pacific* Factors.

Royalty Base and Entire Market Value Rule

A court's objection to royalty damages on products that contain both infringing and non-infringing features is usually not focused on the royalty rate. In its 1995 *Rite-Hite v. Kelley* decision, the Federal Circuit first established the "entire market value rule" (EMVR), which allows patent holders to claim the entire value of the infringing device as a royalty base only if the technology is "the basis for demand for the entire device."⁸

Later decisions reaffirmed the EMVR test and imposed increasingly strict evidentiary standards for its adoption. In the 2012 *LaserDynamics* decision, the Federal Circuit said that a successful EMVR claim must demonstrate that the patented technology "is what motivates consumers to buy [the device] in the first place."⁹ More recently, the Federal Circuit explained that "when the [infringing] product contains multiple valuable features, it is not enough to merely show

that the patented feature is viewed as essential [or] that a product would not be commercially viable without the patented feature.... [T]he patentee must prove that those other features do not cause consumers to purchase the product."¹⁰

Smallest Salable Patent Practicing Unit

When the EMVR is not satisfied, plaintiffs must identify the incremental value of the infringing technology and apportion the royalty base (the revenues from the sale of the infringing product) accordingly. In 2009, a damages award to Cornell University of \$184 million based on Hewlett-Packard's infringement of its patented technology was reduced to \$53 million.¹¹

The award that the court declined to uphold was based on a royalty rate of 0.8% and a royalty base of \$23 billion. Although the patent at issue was for one component of a small element of a computer processor (which itself is part of a central processing unit (CPU) "brick"), Cornell initially claimed royalties on Hewlett-Packard's sales of workstations and servers. This claim did not survive an expert's examination of the EMVR. Cornell's alternative revenue base was, as Judge Rader explained, "one rung down the Hewlett-Packard revenue ladder from servers and workstations to the next most expensive processor-incorporating product": the CPU brick, which generated \$23 billion in sales during the infringement period.¹² Judge Rader argued that the "logical and



Marianne Ley Hayek is a member of the Department of Economics at the University of Wisconsin-Whitewater, where she teaches microeconomics, history of economic thought, and statistics. She is the founder of Touchstone Economics, an economic analysis and litigation support consulting firm.
hayekm@uww.edu

readily available alternative was the smallest salable infringing unit with close relation to the claimed invention – namely the processor itself.”¹³

This became known as the smallest salable patent practicing unit (SSPPU) principle after the *LaserDynamics* court made clear that “patentees may not calculate damages based on sales of the entire product, as opposed to the smallest salable patent-practicing unit, without showing that the demand for the entire product is attributable to the patented feature.”¹⁴

Apportionment Through Royalty Rate: A \$19 Billion Cat

Although courts have embraced the need for apportionment in general and the SSPPU seems to be an acceptable and easily identifiable standard for apportionment, there is some debate concerning whether damages could be apportioned via adjustments to the royalty rate instead of the royalty base. In 2009, the Federal Circuit vacated and remanded a \$358 million verdict because the plaintiff’s damages theory failed to apportion the royalty base.¹⁵ While affirming the need for apportionment, the court suggested that “the base used in a running royalty calculation can always be the value of the entire commercial embodiment, as long as the magnitude of the rate is within an acceptable range (as determined by the evidence).”¹⁶

The Federal Circuit in *Uniloc v. Microsoft* disagreed. Uniloc’s damages expert used revenues from Microsoft’s sales of Office and Outlook, which amounted to \$19 billion, as a “check to determine whether” the \$565 million royalty figure was reasonable. Although Uniloc conceded that the royalty base should *not* be \$19 billion, the court concluded that “[t]he disclosure that a company [Microsoft] has made \$19 billion in revenue from an infringing product cannot help but skew the damages horizon for the jury, regardless of the contribution of the patented component to his revenue.”¹⁷ Quoting from the district

15 *Georgia-Pacific* Factors

The *Georgia-Pacific* factors, derived from a case with that name, provide a framework for determining the royalty rate that would emerge during a hypothetical negotiation in which the patent holder and the infringer are “reasonably and voluntarily trying to reach an agreement.”

The factors are summarized below:

- 1) The royalties received by the patentee for the licensing of the patent, 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 nonexclusive or as restricted or nonrestricted in terms of territory or regarding to whom the manufactured product can be sold;
- 4) The licensor’s established policy and marketing program to maintain the licensor’s patent monopoly by not licensing others to use the invention or by granting licenses under special conditions designed to preserve the monopoly;
- 5) The commercial relationship between the licensor and the licensee, such as whether they are competitors in the same territory in the same line of business or 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 non-patented items, and the extent of such derivative or conveyed sales;
- 7) The duration of the patent and the term of the license;
- 8) The established profitability of the product made under the patent and its commercial success and 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; and
- 15) The amount that a licensor (such as the patentee) and a licensee (such as the infringer) would have agreed on (when the infringement began) if both had been reasonably and voluntarily trying to reach an agreement; that is, the amount that 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.

Georgia-Pacific Corp. v. United States Plywood Corp., 318 F. Supp. 1116, 1120-21 (S.D.N.Y. 1970). **WL**

court's opinion, the CAFC agreed that "[t]he \$19 billion cat was never put back in the bag."¹⁸

Apportionment Methods

When components of the infringing product are sold separately and the patent is for only one of these separately valued components, the SSPPU is easily identified and valued and can act as the royalty base. For example, suppose the infringer sells smart phones that contain multiple components including

infringing technology is related to the phone's camera. Recall the statutory requirement for patent infringement damages: Damages should be "in no event less than a reasonable royalty for the use made of the invention by the infringer."¹⁹ It is entirely possible that the patented technology in the phone's camera, while admittedly not the sole driver of demand, added more to the infringing phone's value than the cost of, say, a replacement camera. A court recognized the limitations of the component pricing

the product with the infringing feature (at a higher price) versus the lower-priced alternative that does not infringe, analysis can quantify the commercial value of the infringing feature.

Conjoint analysis is routinely used by businesses in product development and pricing. Careful discovery requests and interrogatories might unearth internal documentation (whether it is an official conjoint analysis or sales and profit projections) that help quantify the incremental value of the infringing technology.

Royalty damages are typically calculated using a royalty rate that is determined by a court or jury and then multiplied by a royalty base consisting of the infringing sales.

a camera, batteries, speakers, and sensors. The patent is for technology that is found in the battery but contributes to the overall value of the phone. If batteries are sold separately (replacement batteries, for example), the component pricing principle suggests that the royalty base should be the average selling price of the battery multiplied by the number of infringing units sold.

Component pricing might under-compensate the patent holder, however, if there are synergies between the patented technology and the non-patented components. Suppose the

principle in *CSIRO v. Cisco*, writing that "while such a calculation captures the cost of the physical product, it provides no indication of its actual value."²⁰

Consumer surveys can be used to assess the value of the infringing component even when this component is not sold separately. In a "choice-based conjoint" analysis, which is commonly used in marketing research, survey respondents are presented with hypothetical products containing different bundles of features and asked to identify which product they would purchase. Based on the number of respondents who selected

Conclusion

A damages award for patent infringement must be no less than a reasonable royalty paid to the patent holder for the infringer's use of the patented technology. When the infringing product contains multiple components, some of which do not infringe, royalty calculations must apportion the value of the product to account for the infringing and non-infringing features. Absent evidence that the patented feature is the basis for consumer demand, courts insist on a well-reasoned apportioned royalty base for damages. **WL**

ENDNOTES

¹Article I, section 8 of the U.S. Constitution states that "[t]he Congress shall have the Power ... To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."

²35 U.S.C. § 284.

³Landan Ansell *et al.*, 2018 Patent Litigation Study (May 2018), <https://www.ipwatchdog.com/wp-content/uploads/2018/09/2018-pwc-patent-litigation-study.pdf>.

⁴*Garretson v. Clark*, 111 U.S. 120 (1884).

⁵In *Rite-Hite Corp. v. Kelly*, 56 F.3d 1538 (Fed. Cir. 1995), the court stated that apportionment is not necessary if "the invention was the basis for demand for the entire device." This is known as the entire market value rule (EMVR).

⁶*Georgia-Pacific v. United States Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970).

⁷See, for example, factor 6, which considers how the patented product promotes additional sales of non-patented items, and factor 8, which examines the established profitability of the patented product and its current popularity.

⁸*Rite-Hite Corp.*, 56 F. 3d 1538.

⁹*LaserDynamics Inc. v. Quanta Comput. Inc.*, 694 F.3d 51 (Fed. Cir. 2012).

¹⁰*Power Integrations Inc. v. Fairchild Semiconductor Int'l Inc.*, 904 F.3d 965, 979 (Fed. Cir. 2018).

¹¹*Cornell Univ. v. Hewlett-Packard Co.*, 609 F. Supp. 2d 279 (N.D.N.Y. 2009).

¹²*Id.* at 285. Judge Rader referred to this as Cornell's "hypothetical royalty base" because the \$23 billion amount "does not come from adding up invoice amounts, nor from actual CPU brick sales... [Hewlett-Packard's] customers by and large purchased complete server and workstation systems," which contained the CPU bricks of which the patented technology was one component. *Id.*

¹³*Id.* at 288.

¹⁴*LaserDynamics*, 694 F.3d 51.

¹⁵*Lucent Techs. Inc. v. Gateway Inc.*, 580 F.3d 1301, 1337 (Fed. Cir. 2009).

¹⁶*Id.* at 1338-39.

¹⁷*Uniloc USA Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1320 (Fed. Cir. 2011).

¹⁸*Id.*

¹⁹35 U.S.C. § 284 (emphasis added).

²⁰*CSIRO v. Cisco*, Case No. 6:11-cv-00343-LED (E.D. TX, 2014).

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