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IpQ

ENHANCING YOUR IP IQ

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KEY IDEAS:

SOME THINGS NEVER CHANGE: APPORTIONMENT AND THE "ENTIRE MARKET VALUE RULE"

Over the past several years, consideration of various proposed Patent Reform Acts has resulted in pointed—even heated—discussion of the "apportionment" of patent damages and the "entire market value rule" (EMVR). While resisting any urge to jump into the debate, we suggest that understanding case law basics about these two terms should be a part of your IP IQ.

Apportionment has "plagued" the courts in one form or another for more than 75 years. In 1933, Circuit Judge Learned Hand stated,

> The situation was . . . one so common in patent accountings, in which the invention is not of the article as a whole, but of a small detail. The difficulty of allocating profits in such cases has *plagued* the court from the outset, and will continue to do so, unless some formal and conventional rule is laid down, which is not likely. Perhaps, the question is in its nature *unanswerable*. It is of course possible to imagine an invention for a machine, or composition, or process which is a complete innovation, emerging, full grown, like Athene, from its parent's head. It would then be easy to say that profits were to be attributed wholly to the invention. Such inventions are however *mythological*. All have a background in the past, and are additions to the existing stock of knowledge which infringing articles embody along with the invention. It is generally *impossible* to allocate quantitatively the shares of the old and the new, and the party on whom that duty falls, will usually lose. . . . The burden of proof in such cases is the key to the result.[1]

As Judge Hand observed, the patent-in-suit is frequently an improvement to or combined with other unpatented elements to create a larger device or structure and not an entity in itself. When this occurs, it affects the calculation of infringement damages. The fact finder needs to determine the extent to which the patent affects the value of products which embody that patent as opposed to the effect of other, unpatented features.[2] This is the core issue in the apportionment debate.

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ABOUT SHB

Shook, Hardy & Bacon offers expert, efficient and innovative representation to our clients. We know that the successful resolution of intellectual property issues requires a comprehensive strategy developed in partnership with our clients.

1 *Cincinnati Car Co. v. New York Rapid Transit Corp.*, 66 F.2d 592, 593 (2d Cir. 1933) *(emphasis added)*.

2 *Georgia Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116, 1132-334 (S.D.N.Y. 1970), *modified,* 446 F.2d 295 (2nd Cir. 1970), *cert denied,* 404 U.S. 870 (1971). ("There is a basic distinction between a patent which is only a part of a machine or structure and which creates only a part of the profits and, on the other hand, a patented article or a patent which gives the entire value to the combination or an article patented as an entirety. Consequently, it is necessary to determine where the invention extends to and affects the whole article, giving it its essential marketability, or whether it is only for an improvement.").

1. Apportionment: Value of Patent to Product

In practice, apportionment pinpoints that portion of the value of (a) an infringing product (in a reasonable royalty case), or (b) the patent owner's product (in a lost- profits case), which is attributable to the patent-in-suit, as opposed to all other elements that make up the value of the product. Unlike the calculation of damages in lost-profit cases, or proof of a reasonable royalty rate, there are few clear rules about how to apportion the value of a patented invention included as a part of a larger device. In fact, essentially no modern cases discuss the apportionment doctrine.[3]

Often, courts invoke either the EMVR or "but for" causation as methods of apportioning patent value. Let's take a closer look at the EMVR.

2. EMVR: All or Nothing?

The EMVR can be seen as either part of, or a replacement for, apportionment. The EMVR allows a patent owner to recover damages based on the entire market value of a product containing several features when the patent is considered the basis for customer demand and all related components constitute one functional unit.[4] Thus, the EMVR allows for the recovery of damages based on the value of an entire apparatus containing several features, even though only one feature is patented.[5] The rule applies, however, only when the patented feature is the basis for customer demand for the entire product.[6]

Before the pivotal *Rite-Hite* case, the EMVR permitted "recovery of damages based on the value of the entire apparatus containing several features, where the patent-related feature is the basis for customer demand."[7] The Federal Circuit had described the essence of the EMVR in several ways.[8] Some cases expanded the rule to include products that were physically separate, unpatented components, but only where those components "were analogous to a single functioning unit."[9]

In *Rite-Hite,* the court added that the EMVR requires, "[a]ll the components together must be analogous to components of a single assembly or be parts of a complete machine, or they must constitute a functional unit."[10] Since *Rite-Hite,* the Federal Circuit has described the "functional unit test" as the "key criterion" for

3 Eric E. Bensen, *Apportionment of Lost Profits in Contemporary Patent Damages Cases,* 10 Va. J.L. & Tech. 8, *23 (Summer 2005).

4 *Rite-Hite Corp. v. Kelley Co., Inc.*, 56 F.3d 1538, 1549–51 (Fed. Cir. 1995), *cert. denied,* 516 U.S. 867 (1995); *Imonex Servs., Inc. v. W.H. Munzprufer Dietmar Trenner GMBH*, 408 F.3d 1374, 1380 (Fed. Cir. 2005).

5 *Fonar Corp. v. General Elec. Co.*, 107 F.3d 1543, 1552 (Fed. Cir. 1997), *cert. denied,* 522 U.S. 908 (1997).

6 *Id.* (citing *Rite-Hite Corp. v. Kelley Co., Inc.,* 56 F.3d 1538, 1549 (Fed. Cir. 1995), *cert. denied,* 516 U.S. 867 (1995)); *Imonex Servs., Inc.*, 408 F.3d at 1374.

7 *See, e.g., State Indus., Inc. v. Mor-Flo Indus., Inc.*, 883 F.2d 1573, 1580 (Fed. Cir. 1989), *cert. denied,* 493 U.S. 1022 (1990).

8 *See, e.g., TWM Mfg. Co., Inc. v. Dura Corp.*, 789 F.2d 895, 901 (Fed. Cir. 1986), *cert. denied,* 479 U.S. 852 (1986) ("market and financial dependence"); *Kaufman Co., Inc. v. Lantech, Inc.* 926 F.2d 1136, 1144 (Fed. Cir. 1991) ("normally anticipated sale" or "reasonable probability of sale").

9 *See Rite-Hite Corp. v. Kelley Co., Inc.*, 56 F.3d 1538, 1550 (Fed. Cir. 1995), *cert. denied,* 516 U.S. 867 (1995).

10 *Id.*; *see, e.g., Bose Corp. v. JBL, Inc.*, 274 F.3d 1354, 1361 (Fed. Cir. 2001), *cert. denied,* 537 U.S. 880 (2002); *Tec Air, Inc. v. Denso Mfg. Mich. Inc.*, 192 F.3d 1353, 1362 (Fed. Cir. 1999).

lost profits of unpatented materials used with a patented device.[11] There are any number of interesting "functional unit test" and collateral sales opinions that we will review in subsequent *IpQ* issues.

A recent district court opinion by CAFC Judge Randall Rader, sitting as the trial judge by designation, provides valuable insight into the EMVR's application.[12]

In *Cornell University v. Hewlett-Packard Co.*,[13] the patent-in-suit did not cover an entire computer system. Rather, the claimed invention was a small part of the instruction reorder buffer, which was a part of a processor, which was a part of a CPU module, which was a part of a "brick," which was a part of a larger server.[14] When plaintiff sought the entire market value of all servers and workstations sold by the defendant in calculating royalty damages, Judge Rader conducted a *Daubert* hearing and specifically prohibited plaintiff's damages expert from using the EMVR to include such an expansive royalty base.[15] Despite Judge Rader's admonitions, surprisingly, plaintiff's expert testified to a royalty base that incorporated much more than the claimed invention with no evidence to support application of the EMVR.[16] Based on this testimony, the jury awarded royalty damages of more than $180 million.[17]

Obviously not pleased with plaintiff's damages expert, Judge Rayder excluded his testimony.[18] Judge Rayder also granted Hewlett-Packard's post-trial motion for JMOL, or in the alternative for remittitur, and set out helpful guidelines for the EMVR's application. Judge Rader observed that, "The entire point of that rule [the EMVR] is to allow plaintiffs the advantage of collecting royalties on a system that encompasses more than the claimed invention when defendant's real world earnings derive from real world system sales generated by demand for the claimed invention."[19] He also laid out requirements for application of the EMVR, stating,

> The entire market value rule in the context of royalties requires adequate proof of three conditions: (1) the infringing components must be the basis for customer demand for the entire machine including the parts beyond the claimed invention, *Fonar Corp. v. General Electric Co.*, 107 F.3d 1543, 1552 (Fed.Cir.1997); S*tate Indus., Inc. v. Mor-Flo Indus., Inc.*, 883 F.2d 1573, 1580 (Fed.Cir.1989); (2) the individual infringing and non-infringing components must be sold together so that they constitute a functional unit or are parts of a complete machine or single assembly of parts, *Paper Converting Machine Co. v. Magna-Graphics Corp.*, 745 F.2d 11, 23 (Fed.Cir.1984); and (3) the individual infringing and non-infringing components must be analogous

11 *Juicy Whip, Inc. v. Orange Bang, Inc.*, 382 F.3d 1367, 1372 (Fed. Cir. 2004) (citations omitted).

12 In the past, Judge Rader has taken the lead among CAFC judges in analyzing and speaking on damages issues. His discussion of these issues from a trial-judge perspective is both interesting and informative. It will be instructive to see how his colleagues treat him on any appeal.

13 2009 WL 1082485 (March 30, 2009, N.D.N.Y.)

14 *Id.* at *1.

15 *Id.* at *2.

16 *Id.* at *3.

17 *Id.* at *1.

18 *Id.* at *9.

19 *Id.* at *7.

to a single functioning unit, *Kalman v. Berlyn Corp.*, 914 F.2d 1473, 1485, 16 USPQ2d 1093, 1102 (Fed.Cir.1990). It is not enough that the infringing and non-infringing parts are sold together for mere business advantage. *See Rite-Hite*, 56 F.3d at 1549-50. Notably, these requirements are additive, not alternative ways to demonstrate eligibility for application of the entire market value rule. *See Id.* at 1549-50.[20]

When the EMVR applies, the value of the patent need not be apportioned.[21] On its face, the EMVR appears to be an "all or nothing" proposition. If a patent does not create the *entire* market demand for, or is not physically *connected* with, other unpatented components, the EMVR will not apply. On the other hand, if the rule applies, the entire value of the relevant product becomes a part of the damage analysis.[22] Thus, the EMVR provides a solution if the patented aspect drives the total market demand for the product. This situation may be infrequent enough, however, to keep apportionment off your radar.[23]

3. Application of EMVR/Apportionment Rules in Different Types of Damages Cases

Importantly, the EMVR applies in both lost-profits and reasonable-royalty cases.[24] Application of apportionment rules, and, in particular, application of the EMVR, differ depending on the nature of the damages sought.

a. In Lost-Profits Cases

Lost profits from diverted sales are generally calculated as the incremental profits from the revenue lost by the patent owner on sales of its own products diverted by the infringing sales.[25] In lost-profits cases, the EMVR is applied from the patent owner's perspective. The incremental profits on the patent owner's products are those that are relevant under this analysis. The rule is used to determine whether all the incremental profits derived from the patent owner's products are based on market demand for the patented feature. If so, all of the patent owner's incremental profits are recoverable on infringing sales.

Representative Federal Circuit cases discussing the EMVR in the context of a lost–profits claim include the following:

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20 *Id.* at *5.

21 *See Georgia Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116, 1132 (S.D.N.Y. 1970), *modified,* 446 F.2d 295 (2d Cir. 1970), *cert denied,* 404 U.S. 870 (1971).

22 Much of the current debate revolves around disputes about application of the EMVR. Some argue the rule is applied when it should not be while others disagree.

23 *See National Rejectors, Inc. v. A.B.T. Mfg. Corp.*, 188 F.2d 706, 709 (7th Cir. 1951), *cert. denied,* 342 U.S. 828 (1951) (describing as "rare" a situation where "substantially the entire marketable value" of a product was attributable to one patented feature and, but for that feature, there would have been no sales).

24 *Rite-Hite Corp.,* 56 F.3d at 1549; *King Instruments Corp. v. Perego*, 65 F.3d 941, 950 n. 4 (Fed. Cir. 1995), *cert. denied,* 517 U.S. 1188 (1996).

25 *State Indus., Inc. v. Mor-Flo Indus., Inc.*, 883 F.2d 1573, 1579–80 (Fed. Cir. 1989), *cert. denied,* 493 U.S. 1022 (1990). *See King Instruments Corp. v. Perego*, 65 F.3d 941, 953 (Fed. Cir. 1995), *cert. denied,* 517 U.S. 1188 (1996).

1. *Rite-Hite Corp. v. Kelley Co. Inc.*,[26] where the court said physically separate, unpatented equipment generally sold with the equipment that embodied the patent failed to meet the same "functional unit" requirement under the EMVR.[27] The court also decided that the products were not competitive with the infringing products, and therefore, damages were not available.[28]

2. *State Industries, Inc. v. Mor-Flo Industries, Inc.*,[29] where the court considered a patent relating to a water heater's insulation.[30] It affirmed an award of lost profits based on the entire value of the patent owner's competing water heater (that embodied the patent), supporting the trial court's application of the EMVR.[31]

3. *Kori Corp. v. Wilco Marsh Buggies & Draglines, Inc.*,[32] where the patent related to an improvement to a large pontoon-type endless-track amphibious vehicle that would operate in swamps.[33] The court affirmed an award where the trial court applied the EMVR and declined to apportion damages between the value of the patented and unpatented features of the infringing machines.[34]

4. *Paper Converting Machine Co. v. Magna Graphics Corp.*,[35] where the court affirmed an award of lost profits based on the entire value of a paper-processing manufacturing line when the infringement related to one portion of the line.[36]

b. In Reasonable-Royalty Cases[37]

"Calculation of a reasonable royalty . . . requires determination of two separate quantities—a royalty base, or the revenue pool implicated by the infringement, and a royalty rate, the percentage of that pool 'adequate to compensate' the plaintiff for that infringement."[38] Unlike lost-profit damages, in a reasonable-royalty analysis, the EMVR is applied from the infringer's perspective. Specifically, where it applies, the EMVR will increase the dollar value of infringing sales (the royalty base) by including the entire value of the infringing products in that base.

In the context of apportionment, a close relationship exists between the two components of the reasonable-royalty equation (base and rate). But "[t]hese quantities, though related, are distinct. An over-inclusive royalty base including revenues from the sale of non-infringing components is not permissible simply because the royalty rate is adjustable. *See Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1549 n. 9 (Fed.Cir.1995) ('This issue of royalty base is not to be confused with the relevance of anticipated collateral sales to the determination of a reasonable royalty rate.')."[39] Simply put, Judge Rader relied on *Rite-Hite* to say that using the royalty rate (as opposed to the base) to apportion patent value is inappropriate.

26 56 F.3d 1538, 1550 (Fed. Cir. 1995), *cert. denied,* 516 U.S. 867 (1995).
27 *Id.* at 1551.
28 *Id.*
29 883 F.2d 1573, 1580 (Fed. Cir. 1989), *cert. denied,* 493 U.S. 1022 (1990).
30 *Id.* at 1575.
31 *Id.* at 1580.
32 761 F.2d 649, *cert. denied,* 474 U.S. 902 (1985).
33 *Id.* at 651.
34 *Id.* at 656.
35 745 F.2d 11 (Fed. Cir. 1984).
36 *Id.*
37 The debate over the damages provisions of the Patent Reform Act frequently focuses on cases where the royalty base was composed of all sales of the infringing product even though the patent feature was only a small part of the overall product.
38 *Cornell Univ. v. Hewlett-Packard Co.*, 2009 WL 1082485, *4 (March 30, 2009, N.D.N.Y.).
39 *Id.*

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Thus, apportionment of patent value should involve only increasing (EMVR applies) or decreasing (EMVR does not apply) the royalty base.[40]

Representative Federal Circuit cases applying the EMVR in the context of a reasonable-royalty claim include:

1. *Bose Corp. v. JBL, Inc.*,[41] where the court affirmed an award of damages based on the entire value of an infringing loud speaker system when it found that the patented invention "contributed substantially" to the increased demand for the products into which it was incorporated.[42]

2. *Interactive Pictures Corp. v. Infinite Pictures Inc.*,[43] where plaintiff sued for infringement of an image viewing system and was awarded damages in the form of a paid-up royalty.[44] The royalty base included all of the infringer's products, including bundled and convoyed sales that were factored into the royalty rate.[45] The Federal Circuit affirmed the award.[46]

3. *Fonar Corp. v. General Electric Co.*,[47] where, in applying the EMVR, the Federal Circuit affirmed an award of royalty damages based on the entire value of a large MRI machine based on infringement of a patent relating to apparatus and method for using the machine.[48]

4. *TWM Manufacturing. Co., Inc. v. Dura Corp.*,[49] where plaintiff sought reasonable royalty damages based on the infringement of a patent relating to a wheeled-vehicle suspension that allowed trucks to engage an additional axle and wheels to haul heavy loads.[50] The court affirmed a reasonable royalty award of $4.65 million (trebled) based on the entire value of the assembly, including unpatented wheels and axles.[51]

There you have it, a brief overview of some of the key issues underlying the debate about apportionment and the EMVR. Stay tuned to see how Congress and the courts shape these important principles.

40 Differing views on whether this does or does not, or should or should not, happen in practice are at the core of much of the current debate.
41 274 F.3d 1354, 1361 (Fed. Cir. 2001), *cert. denied,* 537 U.S. 880 (2002).
42 *Id.* at 1356.
43 274 F.3d 1371, 1384 (Fed. Cir. 2001), *cert denied,* 537 U.S. 825 (2002).
44 *Id.* at 1371.
45 *Id.* at 1385.
46 *Id.* at 1386.
47 107 F.3d 1543, 1552 (Fed. Cir. 1997), *cert. denied,* 522 U.S. 908 (1997).
48 *Id.* at 1553.
49 789 F.2d 895, 901 (Fed. Cir. 1986), *cert. denied,* 479 U.S. 852 (1986).
50 *Id.* at 896.
51 *Id.* at 898.