

EMVR Update: *Power Integrations, Inc. v. Fairchild Semiconductor Int'l*

Jonathan B. Tropp
Day Pitney LLP
New Haven, Connecticut

I. INTRODUCTION

Though the Federal Circuit revisited the Entire Market Value Rule (“EMVR”) last year, this area of the law of patent damages remains at least as cloudy as ever. In *Power Integrations, Inc. v. Fairchild Semiconductor International*, 904 F.3d 965 (Fed. Cir. 2018), *cert. denied*, __ S.Ct. __, 2019 WL 887884 (2019), the Federal Circuit vacated a \$140 million jury verdict in favor of Power Integrations awarded on the basis of the EMVR. The jury had expressly been instructed it could award damages attributable to an entire multi-feature product under the EMVR only where the patentee establishes the patented feature creates the basis for the customer demand for that product. Otherwise, the jury was instructed, apportionment was required so that damages would reflect only the value attributable to the infringing features of the product. The jury returned a verdict specially finding the patented feature “create[d] the basis for customer demand for the infringing Fairchild products” under the EMVR. Nonetheless, the Federal Circuit vacated the award because Power Integrations had failed to prove other valuable features did *not* cause consumers to purchase the products.

In successive challenges, Power Integrations argued the decision upended decades of precedent, rendering the EMVR a dead letter. Fairchild naturally disagreed, characterizing the Federal Circuit’s decision as a modest one consistent with existing precedent. Neither side is entirely correct in its characterizations. Nor have the courts provided any help. Though the Federal Circuit panel’s September 20, 2018 opinion reflects minor adjustments to its written opinion initially issued in July, both Power Integrations’ petition for rehearing and its petition for writ of *certiorari* to the Supreme Court were denied.

None of the participants, including the court, was entirely consistent or candid describing the court’s EMVR decisions or the EMVR. What ultimately becomes most clear, therefore, is the need for more clarification in future cases.

II. THE EMVR: A VERY BRIEF TUTORIAL

By statute, a prevailing claimant shall be awarded only “damages adequate to compensate for the infringement.” 35 U.S.C. § 284. Consistent with this requirement, the Supreme Court declared more than a century ago patentees “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." *Garretson v. Clark*, 111 U.S. 120, 121 (1884). Where reasonable royalties are sought as damages, apportionment generally requires a determination of the royalty base to which the royalty rate will be applied. *Power Integrations*, 904 F.3d at 977. Federal Circuit precedent has increasingly required that the royalty base "not be larger than the smallest salable unit embodying the patented invention." *Id.* Indeed, "[e]ven when a damages theory relies on the smallest salable unit as the basis for calculating the royalty, the patentee must estimate what portion of the smallest salable unit is attributable to the patented technology when the smallest salable unit itself contains several non-infringing features." *Id.* (citing *VirnetX, Inc. v. Cisco Systems, Inc.*, 767 F.3d 1308, 1327 (Fed. Cir. 2014)).

The EMVR nonetheless "allows for recovery of damages based on the value of an entire apparatus containing several features, when the feature patented constitutes the basis for consumer demand." *Id.* at 978 (quoting *Lucent Techs., Inc. v. Gateway, Inc.*, 850 F.3d 1301, 136 (Fed. Cir. 2009)) (internal quotations omitted). The Federal Circuit has thus affirmed damages awards under the EMVR in numerous cases. *See Bose Corp. v. JBL, Inc.*, 274 F.3d 1354, 1361 (Fed. Cir. 2001) (affirming EMVR award where evidence showed the patented technology worked inextricably with other components of the accused device as a single functioning unit that improved performance and contributed substantially to increased demand); *Tec Air, Inc. v. Denso Mfg. Mich. Inc.*, 192 F.3d 1353, 1362 (Fed. Cir. 1999) (affirming EMVR award where evidence showed customers wanted the patented technology); *Fonar Corp. v. Gen. Elec. Co.*, 107 F.3d 1543, 1552-53 (Fed. Cir. 1997) (affirming EMVR award where evidence showed the infringer's technical literature emphasized the patented feature).

Though perceived to operate as a narrow exception to the apportionment requirement, *see Power Integrations*, 904 F.3d at 978 (referring to the EMVR as an "exception" requiring strict limitation to "ensure that a reasonable royalty does not overreach and encompass components not covered by the patent") (citations and internal quotations omitted), the EMVR might as easily be regarded as a form of apportionment by other means. This is because, even under the EMVR, any damages award must ultimately comply with the statutory requirement that damages be only those "adequate to compensate for the infringement." 35 U.S.C. 284. Thus, in cases in which the EMVR is applied to enlarge the royalty *base*, the royalty *rate* should shrink to reflect the correspondingly diminished contribution of the patented invention to the whole.

An example illustrates the point. Suppose a \$1000 apparatus comprises four main components of equal cost and value, and the patented feature comprises

one of them. Following the “apportionment” approach, a jury might conclude that component corresponds to the smallest salable unit and find damages on the sale of an apparatus comprising that component are 4% of the \$250 value of the component; i.e., \$10.

To invoke the EMVR, the patentee might show the four components work together integrally and consumers buy the apparatus to acquire the patented feature. A jury might then properly apply the EMVR to award damages on the entire sale price of the \$1000 apparatus. The jury should then find, however, the appropriate royalty rate is only 1%. The invention is not more valuable under the EMVR. Damages, therefore, would *still* be \$10 per apparatus. One might reasonably argue that, by assigning a reduced (i.e., proper) royalty rate to account for the relatively lower contribution of the invention to the entire apparatus in contrast with its contribution to the value of one component alone, the damages expert has, consistent with *Garretson*, properly “apportioned” the value of the apparatus to the patented (1%) and unpatented (99%) features.

Indeed, were jurors the hypothetical beings conceived by behavioral economists who make unbiased decisions based on available data, it would be unnecessary to impose stringent restraints on the EMVR. Rather, patentees would be free to select whatever damages model best fits the available data and is most easily susceptible of proof. Because humans are not “econs,” however, the EMVR is deemed problematic “because it ‘cannot help but skew the damages horizon for the jury, regardless of the contribution of the patented component to [] revenue.’” *Power Integrations*, 904 F.3d at 977 (citation omitted). Especially “[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.” *Id.* (internal quotations and citation omitted).

The tight rein on the EMVR is thus driven by human foibles. Cognitive effects such as anchoring dramatically increase the risk allowing the jury to hear a large number will inflate the ultimate award. For example, assume sales of 16,000,000 units of our \$1000 apparatus: A damages award of \$300 million, though almost twice as high as it should be, might seem reasonable measured against \$16 billion in sales, but less so when measured against the \$4 billion value of the smallest salable unit. The problem, of course, increases as the number of components increases and the relative contribution of the smallest salable unit decreases. One can easily imagine circumstances in which the “correct” EMVR royalty rate of, say, 0.005%—implying damages of \$800,000 on sales of \$16 billion—becomes artificially inflated in the face of a damages opinion seeking a royalty of “merely” 0.1%; i.e., \$16 million. Critics of the EMVR fear, *correctly*,

that even a jury that sees through the 20x inflated 0.1% royalty claim, may award damages of, say, \$1.6 million, a “tiny” 0.01% royalty that pales in comparison to \$16,000,000,000.00, but is nonetheless twice what it should be—or worse. *See id.* (“Admission of evidence of the [EMVR] ‘only serve[s] to make a patentee’s proffered damages amount appear modest by comparison, and to artificially inflate the jury’s damages calculation beyond that which is “adequate to compensate for the infringement.”’”) (citations omitted).

Such inflation, so the theory seems to go, would be less likely in the case of apportionment. That is, the jury would be both less likely to award such inflated damages if it learned only that the aggregate value of the smallest salable units was \$16 million and better able to distinguish between a “correct” 5% royalty rate and an inflated 10% royalty, particularly given natural limits on the patentee’s ability to assert a higher royalty rate.

III. The *Power Integrations* Decision

A. Relevant Background Facts and Trial Court Proceedings

Power Integrations and Fairchild both manufacture power supply controller chips, integrated circuits used in power supplies for electronic devices. The power supplies transform AC electricity to DC electricity. A switching regulator provides the desired amount of power to the electronic device.

The relevant patent claims cover an improved switching regulator. Prior art switching regulators suffered from certain problems of inefficiency and noise. The improved switching regulator of the invention employed a feedback signal to overcome these problems.

Power Integrations initially won a \$105 million infringement verdict in 2014. Though the damages award was based on an apportionment theory, Power Integrations had not apportioned damages beyond the smallest salable unit. The *VirnetX* decision led to a new trial on damages. The district court precluded Power Integrations’ apportionment theory in the new trial under *Daubert*, which, by the way, shows apportionment can be difficult and is no panacea, but permitted its damages expert to opine on damages under the EMVR. The jury awarded \$140 million in damages, which the trial court sustained on a motion for judgment as a matter of law. *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, No. 09-cv-4535-MMC, 2016 WL 4446991 (N.D. Cal. Aug. 24, 2016).

In sustaining the verdict, the court concluded substantial evidence supported the verdict under the EMVR, including: (1) it was undisputed the patented feature reduces power consumption and improves efficiency of the

controller chips, (2) witnesses testified customers deemed those attributes essential, particularly after President George W. Bush issued an Executive Order in 2001 requiring federal agencies to purchase electronic products capable of meeting an efficiency standard for which the patented technology was required, (3) one of Power Integrations' largest customers, whom Fairchild's predecessor also pursued, specifically demanded the feature, (4) Power Integrations' first product incorporating the patented technology quickly cannibalized the market for a similar chip without the feature, and (5) a press release of Fairchild's predecessor highlighted the patented feature while one of its engineers wrote an article stating "increasingly stringent government regulations regarding power consumption have been driving demand for power converters with [the patented feature]." *Id.* at *4. In consequence, the trial court concluded:

Because the accused chips at issue here ... have a single purpose, regulating the amount of energy delivered to a charging device, which purpose is directly served by the patented technology's function of increasing the efficiency of such delivery, it is not unreasonable for the jury to have found the patented feature here constitutes the basis for consumer demand for the accused products.

Id. at *5.

The trial court rejected Fairchild's arguments that the patentee's evidence was insufficient to sustain a verdict under the EMVR. Fairchild relied on the Federal Circuit's decision in *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51 (Fed. Cir. 2012), in which the EMVR was rejected as means for assessing damages against laptops practicing a patented method for identifying discs as CD-ROMs or DVDs—one of only many purposes served by the infringing laptops. The trial court both distinguished *LaserDynamics* on its facts and further concluded, to the extent that decision was inconsistent with the earlier decisions in *Bose*, *Tec Air*, and *Fonar*, it was bound to follow the earlier decisions. Fairchild also relied on undisputed evidence that features of the power supply controller chips other than the patented feature were valuable. The trial court disposed of this argument because the evidence was disputed that such features—especially a frequency jitter feature that was the subject of a separate patent litigation between the parties—drove demand for the products.

B. The Federal Circuit Decision

The Federal Circuit initially characterized the EMVR as a rule that allows "recovery of damages based on the value of an entire apparatus containing several

features, when the patented feature constitutes the basis for consumer demand.” *Power Integrations*, 904 F.3d at 978 (quoting *Lucent*). It then concluded there was no inconsistency between *LaserDynamics*, on the one hand, and *Bose, Tec Air*, and *Fonar*, on the other; and subsequent Federal Circuit decisions (including *VirnetX*) had followed *LaserDynamics*; therefore, under the binding law of that case, “[i]t is not enough merely to show that the [patented feature] is viewed as valuable, important, or even essential to the use of the [infringing product.]” *Id.* at 979 (quoting *LaserDynamics*). To this point in its decision, though the Federal Circuit certainly plowed over at least some unevenness among its precedents, it trod no new ground.

The court went on, however, as follows:

As [our precedents] have held, the entire market value rule is appropriate only when the patented feature is the sole driver of customer demand or substantially creates the value of the component parts. ... The question is whether the accused product, compared to other products in the field, has features that would cause consumers to purchase the products beyond the patented feature; i.e., valuable features. Where the accused infringer presents evidence that its accused product has other valuable features beyond the patented feature, the patent holder must establish that these features do not cause consumers to purchase the product.

Id. Because Fairchild’s controllers had other valuable features, such as jittering, and Power Integrations had failed to prove the negative—that those features did not affect consumer demand—its evidence was deemed insufficient as a matter of law to sustain a verdict under the EMVR.

IV. The Question Left Behind

In sum, *Power Integrations* holds: “When the product contains other valuable features, the patentee must prove that those other features do not cause consumers to purchase the product.” *Id.* In support of its petition for *certiorari*, Power Integrations urged this holding broke from precedent by establishing a new and impossible requirement almost unique in the law to prove a negative. In opposition, Fairchild argued the decision involved straightforward application of existing precedent, the natural consequence of patentee’s obligation to demonstrate the patented feature was “the” driver of sales. The Federal Circuit’s denial of rehearing and the Supreme Court’s denial of cert leave open questions concerning the ultimate meaning, strength, and longevity of the decision.