UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF CALIFORNIA SAN JOSE DIVISION

GOLDEN BRIDGE TECHNOLOGY,) Case No. 5:12-cv-04882-PSG
Plaintiff, v. APPLE INC.,	ORDER GRANTING DEFENDANT'S MOTION TO EXCLUDE OPINIONS AND TESTIMONY OF KARL J. SCHULZE
Defendants.	(Re: Docket No. 299)

Karl Schulze is a damages expert. He has been designated as such in over four hundred matters, and has testified at trial or deposition over one hundred fifty times. In this case, Schulze has been tendered by Plaintiff Golden Bridge Technology Inc. for his opinion regarding the proper measure of damages adequate to compensate GBT for Defendant Apple Inc.'s infringement of claims 5, 6 or 7 of United States Patent No. 6,075,793.

Apple does not challenge Schulze's expertise, but rather, his methodology in calculating both the royalty base and the royalty rate that would have resulted from a hypothetical license negotiation between the parties in June 2010. Schulz opines that as compensation for Apple's right to practice the '793 patent, a patent GBT deems essential to the "3GPP" or "WCDMA" standard, Apple and GBT would have agreed to a fair, reasonable and nondiscriminatory ("FRAND") royalty

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of between 0.05 and 0.07% of the sales price of each and every infringing iPhone 4, 4S and 5 and iPad 2nd generation, without any cap or upper limit on total royalties owed.

Because the court agrees with Apple that Schulze's methodology as to both base and rate violate the standards of Fed. R. Evid. 702 and 703 and *Daubert v. Merrell Dow Pharms, Inc.*, the court GRANTS Apple's motion. Schulze's testimony must be excluded.

I. BACKGROUND

The '793 patent describes "a multichannel spread-spectrum system for communicating a plurality of data-sequence signals from a plurality of data channels using parallel chip-sequence signals in which few than all of the channels include header information." The '793 patent was filed on February 6, 1998 by Donald Schilling and Joseph Garodnick, issued on June 13, 2000 and was assigned to GBT.

With the assumption that Apple infringed at least one asserted claim of the '793 patent, that the '793 patent is essential to the 3GPP standard, and that each such claim is "not invalid," Schulze initially considered the appropriate means for measuring GBT's damages.² Recognizing GBT does not manufacture any products that compete with Apple's accused products, Schulze dismissed the idea of calculating any lost GBT profits.³ He then embraced a theory of reasonable royalties calculated using the well-worn *Georgia-Pacific* factors.⁴

With respect to royalty base, Schulze determined "the hypothetical negotiation in this case yields a reasonable royalty that would necessarily have involved a discussion of a rate to be paid

¹ 509 U.S. 579 (1993),

² See Docket No. 300-6 at 94.

³ *See id.* at 93.

⁴ See id.

per handset (terminal) unit."⁵ Schulze chose the handset as the base even though the accused High Speed Uplink Packet Access ("HUSPA") protocol of the Universal Mobile Telecommunications System Release 6 is just one of many features of the baseband processor of the accused products. Schulze noted that Apple in the business of selling handsets, not baseband processors and certainly not implementations of HUSPA. Schulze did not further apportion the royalty base to account for the non-patented features of the accused products.

Schulze then turned to calculating the royalty rate, which comprised the vast majority of his analysis. Regarding *Georgia-Pacific* factor 1, he observed that going back to 1996 GBT has extended multiple licenses to multiple parties, and where it has licensed the '793 patent, it did so simultaneously with all its other standard-essential patents.⁶ A few of these portfolio licenses were licensed outside the context of settling litigation; most were not.⁷

Regarding factor 2, Schulze found none of Apple's patent license agreements "informative" for his rate calculation. Apple's licenses were dismissed either largely because they cover broad portfolios, included cross-licenses, or did not relate to the WCDMA standard.

Regarding factor 3, Schulze opined that the license would be non-exclusive and within the United States, with no restrictions on sub-territory or buyers of the final product.¹⁰

⁵ *Id.* at 101.

⁶ See Docket No. 300-6 at 100.

⁷ *See id.* at 100-10.

⁸ *Id.* at 110.

⁹ See id. at 110-11.

¹⁰ See id. at 112.

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Schulze dismissed factors 4 and 5, because in December 1998 GBT committed to license on FRAND terms. 11 This meant that GBT could not exercise its right to exclude, and was contractually obligated to license the '793 patent on fair, reasonable and non-discriminatory basis.

Regarding factor 6, Schulze affirmed his royalty base as all sales of the infringing products, but disclaimed any derivative or convoyed sales. 12

Regarding factor 7, Schulze found "little influence" from the term of the patent because of the significant time between the issuance of the patent in 2000 and its expiration on 2020.¹³

Regarding factor 8, Schulze focused on the "dramatic increase" of iPhone unit sales since infringement began and Apple's entire royalty burden on the entire iPhone product line. ¹⁴ Schluze opined that this burden "is far below the industry standard cumulative royalty rates." ¹⁵

Regarding factors 9, 10 and 11, Schulze relied on the technical report of Dr. Branimir Vojcic and concluded that "the technology and techniques offered by the patent-in-suit were greatly superior to technologies utilized prior to the implementation of the patented invention through HSUPA in the 3GPP standard. The lack of viable alternatives, both technically and commercially, illustrates the intrinsic value associated with the patent-in-suit." He also highlighted evidence that "Apple not only implemented HSUPA on its devices, but also marketed the HSUPA feature as a selling point for its devices."¹⁷

¹¹ See id.

²² ¹² See id.

²³ ¹³ *See id.* at 113.

¹⁴ *Id*.

²⁵ ¹⁵ *Id*.

²⁶ ¹⁶ *Id.* at 114.

¹⁷ *Id.* at 115.

The heart of Schulze's rate analysis dealt with factor 12. Based on his study of the 1999 UMTS Intellectual Property Association proposed maximum global royalty rate, and various academic studies regarding cumulative rates for standard-essential patents, Schulze opined that the participants in the market for 3G technology would have settled on a certain cumulative royalty rate for all 3G standard-essential patents. He then calculated a royalty for the '793 patent alone as follows. Looking to the declared WCDMA standard essential patent families provided by Sipro Lab Telecom, and Sipro's classification of those families, he determined the percentage of the families related to terminals like the accused products. Schulze then multiplied the number of WCMA standard essential patents identified in one article by the percentage to determine the number of patent families, including the '793 patent, that read on terminals. Dividing his estimated cumulative royalty rate by number of terminal-related essential patents, he arrived at a rate for the '793 patent.²²

Regarding factor thirteen, Schulze assumed that each standard essential patent shares an equivalent value to each other standard essential patent within the overall standard.²³ Schulze's "support for this assumption comes from the UMTS IPR Working Group charged with developing the standard as well as Apple's own public comments regarding its belief as to the proper methodology for determining the value of a standard essential patent under a FRAND context."²⁴

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¹⁸ *See id.* at 123.

¹⁹ Sipro Lab Telecom is a major licensing company specializing in patent pool creation and administration, particularly for telecommunications standards. Sipro Lab Telecom, About Us, available at http://www.sipro.com/About-Sipro.html.

²⁰ See Docket No. 300-6 at 125.

²¹ See id. at 125-26.

²² See id.

²³ See id. at 127.

²⁴ *Id*.

Regarding factor fourteen, Schulze relied on two key expert opinions. The first was Vojcic's opinion that the accused products are specially designed and intended to be used in compliance with the standards at issue such that they necessarily infringe. The second was the opinion of Global Technology Transfer Group, a patent asset consulting and valuation firm retained by GBT in 2011 to evaluate the net present value of the entire GBT portfolio. Regarding factor fifteen, Schulze multiplied his estimated royalty rate range for the '793 patent—0.05% to 0.07%—by the unit revenue for the accused products to arrive at his bottom line estimate of the total amount of royalties owed to GBT by Apple: \$38,664,000 to \$54,130,000.

II. LEGAL STANDARDS

Expert testimony may only be admitted in a manner consistent with the Federal Rules of Evidence, *Daubert, Kumho Tire Co. v. Carmichael*, ²⁸ and the case law that followed. ²⁹ This "gatekeeping obligation" applies to all expert testimony. ³⁰

A trial court must be sure that its review of expert testimony focuses "solely on principles and methodology, not on the conclusions that they generate." "Daubert and Rule 702 are safeguards against unreliable or irrelevant opinions, not guarantees of correctness." "A judge must be cautious not to overstep its gatekeeping role and weigh facts, evaluate the correctness of conclusions, impose its own preferred methodology, or judge credibility, including the credibility

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 $[\]frac{1}{25}$ See id.

²⁶ See id.

²⁷ See id. at 129.

²⁸ 526 U.S. 137 *(*1999).

²⁹ See Fed. R. Evid. 702, 703.

³⁰ *Kumho Tire*, 526 U.S. at 147.

³¹ *Daubert*, 509 U.S. at 595.

³²³² *i4i Ltd. Partnership v. Microsoft Corp.*, 598 F.3d 831, 854 (Fed. Cir. 2010).

of one expert over another. These tasks are solely reserved for the fact finder."³³ The inquiry into the admissibility of expert opinion is a "flexible one," where "[s]haky but admissible evidence is to be attacked by cross examination, contrary evidence, and attention to the burden of proof, not exclusion."³⁴

III. DISCUSSION

The Federal Circuit recently affirmed that "questions regarding which facts are most relevant or reliable to calculating a reasonable royalty are 'for the jury.'"³⁵ This court has itself repeatedly deferred such questions to a jury. But a critical prerequisite to this deference to jury wisdom is that the "the methodology is sound." Here, it is not. In calculating the royalty base, Schulze did not even try to link demand for the accused product to the patented feature, and failed to apportion value between the patented feature and the vast number of non-patented features in the accused products. Schulze had no basis to ignore the fundamental teaching of the entire market value rule, which permits a royalty based on the entire market value of an accused product only where "the patent-related feature is the basis for customer demand." In calculating the royalty rate, Schulze impermissibly relied on licenses without any showing of comparability, relied on a maximum, cumulative royalty rate without any showing that anyone had committed to such a notion and failed to allocate particular value to the invention claimed in the '793 patent.

A. Reasonable Royalty Basics

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³³ Apple Inc. v. Motorola, Inc., Case No. 12-4882, slip op. at 40 (Fed. Cir. Apr. 25, 2014).

³⁴ Primiano v. Cook, 598 F.3d 558, 564 (9th Cir. 2010) (citing Daubert, 509 U.S. at 594, 596).

³⁵ *Apple Inc.*, slip op. at 41 (quoting *i4i*, 598 F.3d at 856).

³⁶ See, e.g., HTC Corp. v. Technology Properties Ltd., Case No. 5:08-cv-00882-PSG, Docket No. 563 at 5 (N.D. Cal.).

³⁷ *Id*.

³⁸ Lucent Techs. Inc. v. Gateway, Inc., 580 F.3d 1301, 1336 (Fed. Cir. 2009).

35 U.S.C. § 284 provides that "[u]pon finding for the claimant, the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court."

The goal of the damages award is not to punish the infringer, but rather to make the patentee whole by ascertaining what the patent holder would have made "had the infringer not infringed." Infringement compensation can be the patentee's "lost profits" or the "reasonable royalty he would have received through arms-length bargaining." "The burden of proving damages falls on the patentee."

Here, GBT seeks compensation based only on the reasonably royalty approach. A reasonable royalty is the amount that Apple would have paid GBT for a license to the '793 patent in a hypothetical world "just before infringement began." In this hypothetical negotiation, the parties are presumed (1) to be willing to give and take a license and (2) to accept that the asserted patent claims are valid and infringed. 43

The calculation of the reasonably royalty is a two-step process. First, it requires the determination of a royalty base, "or the revenue pool implicated by the infringement."⁴⁴ The

³⁹ *Lucent*, 580 F.3d at 1324.

 $[\]parallel$ 40 Id.

⁴¹ *Id*

 $[\]parallel$ 42 Id.

⁴³ See id. at 1324-25.

⁴⁴ Cornell Univ. v. Hewlett-Packard Co., 609 F. Supp. 2d 279, 286 (N.D.N.Y.).

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second determination is the royalty rate, or "the percentage of that pool 'adequate to compensate' the plaintiff for that infringement."45

The case involves an additional consideration of FRAND licensing terms. FRAND licensing practices have been addressed in three recent cases: Microsoft Corp. v. Motorola. Inc. 46 *In re Innovatio IP Ventures, LLC Patent Litig.* 47 and *Realtek Semiconductor Corp. v. LSI Corp.* 48 Generally, when a standard setting body incorporates patented technology into an industry-wide standard, the FRAND licensing commitment prevents patentees from "extort[ing] their competitors or prevent[ing] competitors from entering the marketplace." Commentators have termed these problems "patent hold-up" or "royalty stacking." To prevent these problems, a FRAND license should compensate a patentee for their technical contribution to the technology embodied in a standard, but should not compensate them for mere inclusion in the standard. ⁵⁰ Courts and experts have applied modified the *Georgia-Pacific* factors to FRAND hypothetical negotiations.⁵¹

B. Schultze's Flawed Royalty Base: To Escape the Clutches of the EMVR Requires **Evidence of Industry Practice**

⁴⁵ *Id*.

⁴⁶ Case No. 10-cv-1823 JLR, 2013 WL 2111217 (W.D. Wash. Apr. 25, 2013).

⁴⁷ MDL 2303, 2013 WL 5593609 (N.D. III. Oct. 3, 2013).

⁴⁸ Case No. 5:12-cv-03451-RMW, 2014 WL 46997 (N.D. Cal. Jan. 6, 2014).

⁴⁹ Microsoft Corp. v. Motorola, Inc., 864 F. Supp. 2d 1023, 1027 (W.D. Wash. 2012).

⁵⁰ See RealTek, Docket No. 298 at 15, 17 (Final Jury Instructions) (instructing the jury that "[y]ou should not consider [the patentee's] advantage resulting from the standard's adoption, if any. However, you may consider any advantage resulting from the technology's superiority" and calculating a FRAND based on (1) the standard's value to the product and (2) the patent's value to the standard.").

⁵¹ See Microsoft, 2013 WL 211217 at *14-15; Innovatio, 2013 WL 5593609 at *5; RealTek, 2014 WL 46997 at *1-2.

Calculating a royalty is no small challenge where one component "may be covered by an asserted patent, while other components are not." In *Lucent*, the Federal Circuit held that if the patentee seeks a royalty base equivalent to the "entire market value" of the accused product, "the patentee must prove that 'the patent-related feature is the 'basis for customer demand." *Lucent* struck the jury's damages award where the royalty was based on the "entire market value" of the accused product, Microsoft Outlook, where there plaintiff presented no evidence to establish that the allegedly infringing smaller-component, the date-picker tool, was a substantial basis for consumer demand for Outlook. *Lucent* thus stands for the proposition that, in the absence of evidence that the infringing feature drives demand, the royalty base must be somehow apportioned to reflect the value of the patent-related feature in the absence of the non-infringing features. ⁵⁵

Here, there is no dispute that Schulze did not apportion the royalty base. In his report he says without qualification that the base is "sales of the infringing products." Although he asserts that Apple "marketed the HSUPA feature as a selling point for its devices," his testimony makes clear that he did nothing to analyze whether demand for those devices was actually based on the invention claimed the '793 patent. Try as it might, the court cannot square this no-base-apportionment, no-demand-analysis methodology with *Lucent*'s central holding.

⁵² LaserDynamics, Inc. v. Quanta Computer, Inc., 694 F.3d 51, 75 (Fed. Cir. 2012).

⁵³ *Lucent*, 580 F.3d at 1336.

⁵⁴ *Id.* at 1337-38.

⁵⁵ See id.

⁵⁶ Docket No. 300-6 at 112.

⁵⁷ See Docket No. 300-6 at 174 ("Q: And in your report in this case you did not present any analysis attempting to show that the '793 patent drives demand for iPhones or iPads, correct? A. We're not in any way making that assertion, no."); see also id. ("Q: You did not perform a separate analysis to show that the '793 patent drives demand for the accused products and thus the entire market value applies, correct? A: No, we're not in any way asserting that the '793 patent in any way is responsible for driving ultimate demand in—in and of itself for the final product, no.").

As its primary defense, GBT urges that Schulze relied on industry practice in using the unit price of each accused product as a base for an uncapped royalty. But although the court has carefully studied the record looking for any hard evidence of such a practice or custom, it could find none. None of the third-party papers Schulze cites provides that any industry participant, let alone the industry as a whole, has agreed that the entire market value of a smartphone or tablet may serve as the base for a royalty for use of a patent on a particular feature without any cap or limit on the total royalties owed. At most, the papers offer the authors' proposals or aspirations, not actual practice in the field. Nor does Schulze point to any license in which Apple agreed to pay an uncapped royalty based on a percentage of the entire market value of any iPhone or iPad. "[N]othing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence that is connected to existing data only by the ipse dixit of the expert. A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered." "58

As a secondary defense, GBT highlights the iPhone and iPad as the smallest saleable unit available for consideration. But throughout this litigation, GBT has taken the position that the entire infringing functionality lies in the baseband processor, not the accused product as a whole.⁵⁹ The proper view of the smallest saleable unit cannot change at a different stage of the litigation simply because it may now serve a different purpose.

Even if the accused products were the smallest saleable unit, this court has previously explained that, under the Circuit's case law, relying on the smallest saleable unit does not relieve a

⁵⁸ Gen. Elec. Co. v. Joiner, 522 U.S. 136, 146 (1997).

⁵⁹ See, e.g., Docket No. 189 at 16 ("the infringing instrumentality resides in the Baseband Processor").

patentee of the burden of apportioning the base. In *LaserDynamics*, the Federal Circuit "reaffirm[ed] that in any case involving multi-component products, 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. This language affirms that the smallest salable unit must be closely tied to the patent to suffice. Later in the opinion, the court specifically addresses *LaserDynamics* argument that defendant Quanta was in the business of marketing and selling only entire computers, rather than the independent purportedly infringing feature called "ODD," and thus the entire computer was the only product for which accurate market data was available. The court rejected this argument, concluding that if the smallest salable unit was in fact the entire computer, "the exceedingly difficult and error-prone task of discerning the ODD's value relative to all other components in the laptop remains."

C. Schultze's Flawed Royalty Rate: Rates Can't Rely on Other Licenses Not Shown to Be Comparable, and the Particular Value of the Asserted Patent to the Standard Cannot be Ignored

Schulze's analysis of the royalty rate fares little better. Three particular errors render his analysis unreliable.

First, Schulze erred in his use of portfolio licenses secured in settlement of various GBT patent infringement cases in the District of Delaware. These cases did not involve the '793 patent but rather various "RACH" patents. After an extended mediation with the court, GBT entered into

⁶⁰ See Dynetix Design Solutions, Inc. v. Synopsys, Inc., Case No. 5:11-cv-05973 PSG, 2013 WL 4538210, at *3 (N.D. Cal. Aug. 22, 2013).

⁶¹ LaserDynamics, 694 F.3d at 67-68.

⁶² *Id.* at 69-70.

⁶³ *Id.* at 70; *see also Uniloc v. Microsoft*, 632 F.3d 1292, 1319-20 (Fed. Cir. 2011) ("The Supreme Court and this court's precedents do not allow consideration of the entire market value of accused products for minor patent improvements simply by asserting a low enough royalty rate.").

fully-paid lump-sum licenses with eight defendants. Using data from GBT's Delaware counsel, Schulze included the effective royalty rates from these lump-sum licenses as part of his analysis. But neither Schulze nor the Delaware counsel did any comparison of the value of the RACH patents to the accused products in the Delaware litigation (for example, GPS devices) to the value of the '793 patent to the accused product here. Nor does he account for the portion of the lump sum settlements that would cover future sales. Especially in the absence of any hard evidence the Delaware licenses are comparable to the proposed license in this case, ⁶⁴ their incorporation flies in the face of the Federal Circuit's explicit teaching that parties may not rely on licenses that have "no relationship to the claimed invention" or are not "commensurate with" the accused products. ⁶⁵

Second, Schulze erred in relying on a maximum, cumulative royalty rate for WCDMA patents. The papers Schulze relies on attempt to predict what such a rate would be, but he identifies no evidence that any party ever agreed to such a rate. Schulze himself admitted at deposition that "[n]o one licensee is going to say, yes, that's what I paid because they're not paying directly."

Third, Schulze erred in assuming the value of the '793 patent was no different than the value of each of the other WCDMA standard-essential patents considered. GBT identifies no case law supporting the notion that a claimed standard-essential patent gets a free pass on the fundamental notion that a patent damages methodology must be "tied to the relevant facts and

⁶⁴ Cf. HTC Corp. v. Technologies Properties Ltd., Case No. 5:08-cv-00882-PSG, Docket No. 502 at 3-4.

⁶⁵ ResQNet.com v. Lansa, 594 F.3d 860, 870 (Fed. Cir. 2010).

⁶⁶ Docket No. 300-6 at 183.

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circumstances of the case at issue."67 If anything, the case law is clear that mere patent counting and dividing is not enough.⁶⁸

IV. CONCLUSION

Schulze's opinions will not be admitted in their current form. However, following Chief Judge Rader's example in *Cornell*, the court will give him another shot. ⁶⁹ GBT may tender a new damages expert report in accordance with the guidance in this order no later than May 23, 2014. Apple may update its own damages expert report, but only for purposes of responding, no later than May 30, 2014. By this same date, Apple may also depose Schulze on any new expert report.

IT IS SO ORDERED.

Dated: May 18, 2014

United States Magistrate Judge

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⁶⁷*Uniloc*, 632 F.3d at 1315.

⁶⁸ See Microsoft Corp. v. Motorola, Inc., Case No. 10-cv-1823-JLR, 2013 WL 2111217, at *80 (W.D. Wash, Apr. 25, 2013); In re Innovatio IP Ventures, LLC Patent Litig., MDL 2303, 2013 WL 5593609, at *39 (N.D. Ill. Oct. 3, 2013).

⁶⁹ See 609 F. Supp. 2d at 284 (offering a patentee one further opportunity with similarly defective damages expert testimony even in the middle of a trial.); cf. Dynetix, 2013 WL 4538210, at *5.