# United States Court of Appeals for the Federal Circuit

SUMMIT 6, LLC, Plaintiff-Cross Appellant

v.

# SAMSUNG ELECTRONICS CO., LTD., SAMSUNG TELECOMMUNICATIONS AMERICA, LLC,

Defendants-Appellants

2013-1648, -1651

Appeals from the United States District Court for the Northern District of Texas in No. 11-CV-0367, Judge Reed O'Connor.

Decided: September 21, 2015

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THEODORE STEVENSON, III, McKool Smith, P.C., Dallas, TX, argued for plaintiff-cross appellant. Also represented by Douglas Aaron Cawley, Phillip Aurentz, Richard Alan Kamprath; Joel Lance Thollander, John Bruce Campbell, Gretchen Curran, Kathy Hsinjung Li, Austin, TX; Bradley Wayne Caldwell, Caldwell, Cassady & Curry, Dallas, TX.

CARTER GLASGOW PHILLIPS, Sidley Austin LLP, Washington, DC, argued for defendants-appellants. Also represented by JOSEPH GUERRA, RACHEL HEATHER TOWNSEND.

Before PROST, Chief Judge, REYNA, and HUGHES, Circuit Judges.

REYNA, Circuit Judge.

This appeal is from a final judgment entered on a jury verdict in a patent case. The jury found the asserted claims of U.S. Patent No. 7,765,482 ("the '482 patent") not invalid and infringed. The jury awarded Appellee-Cross Appellant Summit 6, LLC ("Summit") \$15 million in damages. The parties raise various issues relating to the proper legal framework for evaluating reasonable royalty damages in the patent infringement context. Also before us are questions regarding claim construction, infringement, invalidity, and the admissibility of expert testimony. For the reasons explained below, we affirm.

#### I. BACKGROUND

#### A. The '482 Patent

Summit is the owner by assignment of the '482 patent, entitled "Web-based Media Submission Tool." The '482 patent relates to the processing of digital content, such as digital photos. '482 patent at col. 1 ll. 11-14. The invention "provides an improved web-based media submission tool" that includes "several unique and valuable functions." *Id.* at col. 2 ll. 7-8. The embodiment described in the specification focuses on a tool used to submit photos to a website. *Id.* at col. 2 ll. 44-60, col. 3 ll. 55-64. This embodiment is described as software that allows a user to place the photo into a website form either by dragging and dropping the photo from the user's computer or by using a mouse click within the website. *Id.* at col. 3 ll. 20-48. Among other things, the '482 patent teaches a web-based

media submission tool with "a variable amount of intelligent pre-processing on media objects prior to upload." *Id.* at col. 2 ll. 16-17.

The "intelligent preprocessing" taught by the '482 patent includes the "ability to control the width and height of the media object identifier and the ability to preprocess the media objects in any number of ways prior to transporting to a second location." *Id.* at col. 4 ll. 53-56. The patent describes this process in detail:

[T]he [invention] may resize the image, (i.e., increase or decrease its size as defined by either physical dimensions, pixel count, or kilobytes). Compression, for example, is a type of sizing. The [invention] may also change the image's file format, . . . change the quality setting of the image, crop the image or change the aspect ratio, add text or annotations, encode or combine . . . the media object, or enhance the media object by changing image values, for example, relating to contrast or saturation.

Id. at col. 4 ll. 57-67.

Summit asserted independent claim 38 and dependent claims 40, 44-46, and 49 at trial. Claim 38 recites:

- 38. A computer implemented method for preprocessing digital content in a client device for subsequent electronic distribution, comprising:
- a. initiating, by said client device, a transfer of digital content from said client device to a server device, said digital content including one or more of image content, video content, and audio content;

b. pre-processing said digital content at said client device in accordance with one or more preprocessing parameters, said one or more preprocessing parameters being provided to said client device from a device separate from said client device, said one or more pre-processing parameters controlling said client device in a placement of said digital content into a specified form in preparation for publication to one or more devices that are remote from a server device and said client device; and

c. transmitting a message from said client device to said server device for subsequent distribution to said one or more devices that are remote from said server device and said client device, said transmitted message including said pre-processed digital content.

*Id.* at col. 13 l. 56-col. 14 l. 14 (emphases added to relevant terms).

# B. Procedural History

On February 23, 2011, Summit sued Samsung Electronics Co., Ltd., Samsung Telecommunications America LLC (collectively, "Samsung"), Research in Motion Limited, Research in Motion Corp. (collectively, "RIM"), Facebook, Inc. ("Facebook"), and other defendants asserting infringement of the '482 patent. Summit asserted that the process of sending photographs via the multimedia messaging service ("MMS") as used by smartphones and tablets designed, manufactured, and sold by Samsung infringes the '482 patent.

In the district court, the parties disputed the proper meaning of fourteen claim terms. As relevant to this appeal, the parties disputed the proper meaning of "publi-

cation/publishing" and "receiving"/"provided to."1 sung contended that "publication" should be construed to mean "making the digital content publicly available (e.g. posting the digital content on a web page)" in order to differentiate the term from "transmitting" and "distribution." Summit argued that publication requires no construction and, if it does, it should be "sharing." Regarding the "receiving"/"provided to" terms, Samsung argued that claim 38 required the active receipt of the pre-processing parameters during the operation of the claimed method. Samsung contended that the receipt of the pre-processing parameters must occur during the operation of the meth-Summit argued that the receipt of pre-processing parameters required ongoing activity, but could also encompass the receipt of the pre-processing parameters prior to the commencement of the claimed method.

On May 21, 2012, the district court issued an order construing the disputed claim terms. Regarding "publication," the district court agreed with Samsung and construed the term to mean "making publicly available." The district court declined to construe the "receiving"/"provided to" terms, finding that the terms required no construction. RIM settled thereafter.

On October 22, 2012, Samsung filed a motion for summary judgment of non-infringement. The district court denied Samsung's motion as to literal infringement, finding that a genuine issue of material fact existed as to whether Samsung's products perform the recited preprocessing step. The court granted other aspects of Samsung's motion, finding that prosecution history estoppel

<sup>&</sup>lt;sup>1</sup> The "receiving"/"provided to" terms include "receiving . . . from a remote device," "received from a device separate from a client device," and "provided to said client device by a device separate from said client device."

bars application of the doctrine of equivalents to the preprocessing step. Soon thereafter, Facebook settled.<sup>2</sup> Samsung was then the only remaining defendant.

Beginning on March 29, 2013, the district court held a six-day jury trial. During trial the parties presented competing evidence regarding the provision of preprocessing parameters to the client device. Summit contended that receipt of the pre-processing parameters during the operation of the method was not required. Summit's expert, Dr. Mark Jones, testified that even if active receipt during the operation of the method is required, Samsung phones receive parameters when phones are reflashed or when software updates are provided. Samsung's expert, Dr. Earl Sacerdoti, explained that active receipt of the parameters is required and the preprocessing parameters are not provided to any accused Samsung device during any pre-processing operations.

On the "publication" limitation, Summit contended that Samsung's accused devices prepare the images for "publication." Summit's expert, Dr. Jones, explained that when an image is resized in Samsung phones, the digital content is placed in a form in preparation for both transmission and publication. Samsung's expert, Dr. Sacerdoti, explained that any alterations to the image during the MMS process are done to meet carrier transmission requirements for message size limits, not to prepare the message for publication.

Summit then presented evidence of damages through its expert Mr. Paul Benoit. Mr. Benoit explained that Samsung would have agreed in a hypothetical negotiation

<sup>&</sup>lt;sup>2</sup> Facebook was also accused of infringing U.S. Patent No. 6,895,557 ("the '557 patent"). The '482 patent is a continuation of the '557 patent.

to pay Summit \$0.28 per phone to provide the infringing features on their phones over the life of the patent. Mr. Benoit acknowledged that he relied on a methodology not previously used or published in peer-reviewed journals. Samsung's expert, Mr. Christopher Martinez, testified that because infringement takes place at the software level, no company would agree to pay a running royalty on a phone. He testified that a proper royalty would be a \$1.5 million lump sum. He based this conclusion on two license agreements.

After the close of Summit's case-in-chief, Samsung presented evidence that it asserted showed that the '482 patent is invalid over U.S. Patent No. 6,038,295 ("Mattes"). At trial, the parties agreed that the basic operation of the system disclosed in Mattes included taking a picture, pre-processing the picture, and transmitting the picture to a server over a wireless network. Summit's expert, Dr. Jones, testified that Mattes fails to disclose the pre-processing step of claim 38 because the imaging device does not "know" that a photo has met the server's specification when the photo is transmitted. Dr. Jones further testified that the limitations of claims 40 and 46 were similarly not disclosed by Mattes.

The jury returned a verdict on April 5, 2013, finding the five asserted claims of the '482 patent not invalid and infringed. The jury awarded Summit \$15 million in damages. The jury indicated on the verdict form that this was a lump sum award.

The parties filed post-trial motions. The district court granted Samsung's pre-verdict motion for judgment as a matter of law ("JMOL") of no direct infringement and denied all other pre-verdict motions. The district court denied all of Samsung's post-verdict motions except its motion to reduce prejudgment interest.

The parties timely appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

#### II. DISCUSSION

#### A. Claim Construction

On appeal, the parties dispute whether the asserted claims of the '482 patent require that pre-processing parameters be provided to the client device during the computer-implemented method for pre-processing digital content or whether it can occur prior to operation of the method. Samsung argues that the district court erred in declining to construe the term "being provided to" as used in claim 38 because this term requires the provision of the pre-processing parameters during the operation of the method. Samsung contends that this ongoing activity is compelled not only by the language of the claim, but also by the language of other claims and the prosecution history.

Summit asks that we conclude Samsung waived the argument that "being provided to" requires that the preprocessing parameters be provided to the device during the operation of the method. In the alternative, Summit argues that there is no evidence to support Samsung's proposed limitation on the claim language. Summit contends that "being provided to" is not a verb requiring ongoing activity, but instead a phrase functioning as an adjective that describes a characteristic of "said . . . parameters."

We first address the issue of waiver. To avoid waiver, a party's argument at trial and the appellate level should be consistent. Finnigan Corp. v. Int'l Trade Comm'n, 180 F.3d 1354, 1363 (Fed. Cir. 1999). We find that Samsung has argued throughout this action that the claimed provision of pre-processing parameters must be performed as an active step of the claimed method. Samsung's argument on this issue has been sufficiently consistent to negate a finding of waiver. For these reasons, we conclude that Samsung has not waived its argument. We now turn to the merits of the claim construction dispute.

Claim construction is generally a matter of law that we review de novo, but it may have underlying factual determinations that are reviewed for clear error. Pharm. USA, Inc. v. Sandoz, Inc., 135 S. Ct. 831, 837 (2015). The process of construing a claim term begins with the words of the claims. Phillips v. AWH Corp., 415 F.3d 1303, 1312-14 (Fed. Cir. 2005) (en banc); Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996). However, the claims "must be read in view of the specification, of which they are a part." Phillips, 415 F.3d at 1315 (quoting Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370 (1996)). Additionally, the doctrine of claim differentiation disfavors reading a limitation from a dependent claim into an independent claim. See InterDigital Comme'ns, LLC v. Int'l Trade Comm'n, 690 F.3d 1318, 1324 (Fed. Cir. 2012). Although courts are permitted to consider extrinsic evidence, like expert testimony, dictionaries, and treatises, such evidence is generally of less significance than the intrinsic record. *Phillips*, 415 F.3d at 1317 (citing C.R. Bard, Inc. v. U.S. Surgical Corp., 388 F.3d 858, 862 (Fed. Cir. 2004)). Extrinsic evidence may not be used "to contradict claim meaning that is unambiguous in light of the intrinsic evidence." Id. at 1324.

While the parties focus on the words "being provided to," the surrounding language of the claim is instructive. The relevant limitation of claim 38 requires:

b. pre-processing said digital content at said client device in accordance with one or more pre-processing parameters, said one or more pre-processing parameters being provided to said client device from a device separate from said client device, . . . ;

'482 patent at col. 14 ll. 1-5 (emphasis added). We find that "being provided to" is not used as a verb in claim 38, but instead is a part of a phrase that conveys information

about the "pre-processing parameters." In this claim, the pre-processing parameters are "being provided to" the client device from a second device. Id. This is not a step in the claimed method. It is, instead, a phrase that characterizes the claimed pre-processing parameters. The use of the term "said" indicates that this portion of the claim limitation is a reference back to the previously "pre-processing parameters." See Baldwin Graphic Sys., Inc. v. Siebert, Inc., 512 F.3d 1338, 1343 (Fed. Cir. 2008) (noting that claims using the term "said" are "anaphoric phrases, referring to the initial antecedent phrase"). That the pre-processing parameters come from a second device is merely a characteristic of the parameters. It is not a step of the method, nor does it require current or ongoing activity.

Further, the district court did not err in declining to construe the term. While the court must resolve actual disputes regarding the proper scope of a claim term, O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., 521 F.3d 1351, 1360 (Fed. Cir. 2008), restating a settled argument does not create an actual dispute within the meaning of O2 Micro, Finjan, Inc. v. Secure Computing Corp., 626 F.3d 1197, 1207 (Fed. Cir. 2010). At the claim construction stage, the district court rejected Samsung's argument that ongoing activity is required—the heart of the parties' disagreement—and declined to further construe the term because it was a "straightforward term" that required no construction. J.A. 45. "Being provided to" is comprised of commonly used terms; each is used in common parlance and has no special meaning in the art. Because the plain and ordinary meaning of the disputed claim language is clear, the district court did not err by declining to construe the claim term.

Samsung contends that the district court read a limitation out of claim 38 by refusing to construe this term. Samsung argues that by failing to limit the claim to active receipt of the pre-processing parameters, the district court

effectively read the "being provided to" language out of the claim. We disagree. That the pre-processing parameters are on the client device and that they have come from a second device must be proved, just like any other limitation. The claim term "being provided to," however, does not limit the claim to the provision of pre-processing parameters only during the operation of the method.

Samsung argues that other claims use language that clearly indicates temporal activity and concludes that the "being provided to" term must indicate present and ongoing activity. Samsung suggests that claims 36, 37, and 51, use language that indicates a past activity. patent at col. 13 ll. 21-22 ("pre-processing parameters that were provided to said client device . . . "), col. 13 ll. 45-46 ("pre-processing parameters that were provided to said client device . . . "), col. 14 ll. 49-50 ("pre-processing parameters that have been provided to ..."). Yet, other claims use language indicating that the provision must occur during the operation of the claimed method. Id. at claim 26, col. 9 ll. 23-24 ("receiving pre-processing parameters from a remote device . . . "), claim 12, col. 10 ll. 43-44 ("receiving pre-processing parameters from a remote device . . . . "). Neither of these sets of claims, however, provides an indication of what the applicants intended when they chose the phrase "being provided to," and the plain meaning of this term does not clearly delineate the temporal limitation Samsung suggests.

Samsung points to the prosecution history to support its position, arguing that amendments to other claims show that claim 38 requires ongoing activity during operation of the method. This argument misinterprets the prosecution history. During prosecution, the applicant presented claims reciting "previously received preprocessing parameters" in the third limitation of each claim. J.A. 25153-56 (claims 16, 23, and 26). The examiner rejected these claims as indefinite under 35 U.S.C. § 112 para. 2. The examiner stated:

The step of "pre-processing" in claims 16, 23, and 26 recite "previously received pre-processing parameter." [sic] Since the claims are not shown [sic] any previously received parameter prior to the "pre-processing" step, such language is indefinite.

J.A. 25179. In response, the applicant amended the first limitation of these claims to recite "receiving preprocessing parameters...," thus showing the receipt of the parameters referenced in the third limitation and creating the proper basis for receipt of the "previously received parameters." This does not preclude prior receipt as to either these claims, or to claim 38, which was subsequently added.

Finally, Samsung argues that the preamble is limiting because it "provides context essential to understanding the corresponding steps in the body of the claim" because it is the only part of the claim that refers to the advance over the prior art. Appellants' Opening Br. at 41. Samsung concludes that because the preamble is limiting, provision of the parameters must happen during the preprocessing step. We disagree that the preamble here is limiting. Generally, a preamble is not limiting. Symantec Corp. v. Computer Assocs. Int'l, Inc., 522 F.3d 1279, 1288 (Fed. Cir. 2008). For example, "[p]reamble language that merely states the purpose or intended use of an invention is generally not treated as limiting the scope of the claim." Pacing Techs., LLC v. Garmin Int'l, Inc., 778 F.3d 1021, 1023-24 (Fed. Cir. 2015) (quoting Bicon, Inc. v. Straumann Co., 441 F.3d 945, 952 (Fed. Cir. 2006)). Samsung does not contend that the preamble to claim 38 is necessary to provide antecedent basis or that the applicant placed clear reliance on the preamble during prosecution. See Pacing, 778 F.3d at 1024 ("Because the preamble terms . . . provide antecedent basis for and are necessary to understand positive limitations in the body of claims ..., we hold that the preamble to claim 25 is limiting.").

Moreover, the preamble to claim 38 is duplicative of the limitations in the body of the claim and merely provides context for the limitations. *See Symantec*, 522 F.3d at 1288-89.

In sum, the district court properly rejected Samsung's argument that the "being provided to" language of claim 38 requires that the pre-processing parameters are provided to the client device during operation of the claimed method. We affirm the district court's denial of the motion for new trial based on claim construction.

# B. Infringement

After the jury returned its verdict finding the five asserted claims of the '482 patent not invalid and infringed, the district court denied Samsung's pre-verdict JMOL of no indirect infringement.

Samsung argues that the jury's verdict on indirect infringement is not supported by substantial evidence because Samsung's accused phones do not pre-process "in preparation for publication." Samsung argues that under the district court's constructions, Summit was required to show that Samsung's accused phones modify a digital image in preparation for making the image publicly available. Samsung argues that Summit failed to make such a showing. We disagree.

A denial of a motion for JMOL is not unique to patent law, and thus, we apply the law of the regional circuit, here the Fifth Circuit. *Transocean Offshore Deepwater Drilling, Inc. v. Maersk Drilling USA, Inc.*, 699 F.3d 1340, 1346-47 (Fed. Cir. 2012). Under Fifth Circuit law, a district court's decision on a motion for JMOL is reviewed de novo, reapplying the JMOL standard. *Ford v. Cimarron Ins. Co., Inc.*, 230 F.3d 828, 830 (5th Cir. 2000) (citing *Omnitech Int'l, Inc. v. Clorox Co.*, 11 F.3d 1316, 1322-23 (5th Cir. 1994)). JMOL is appropriate when a party has been fully heard on an issue and there is no legally suffi-

cient evidentiary basis for a reasonable jury to find for that party on that issue. Fed. R. Civ. P. 50(a)(1).

The jury heard evidence from Summit's expert, Dr. Jones, that Samsung's accused devices perform the methods of the asserted claims. Dr. Jones explained that the carriers dictate image height and width resolution parameters to maintain image quality in preparation for publication. J.A. 6128-29, 7282-83. Dr. Jones also explained that the pre-processing performed by Samsung's phones is in preparation for publication. J.A. 7283. Dr. Jones outlined the difference between preparing for transmission and preparing for publication. J.A. 6149-50. Dr. Jones noted that if the pre-processing were only for transmission, Samsung could use an "extremely low JPEG quality parameter" that "would likely look terrible at the end but it would be quite small." J.A. 7283.

Samsung's expert, Dr. Sacerdoti, admitted that the source code contained in each of the phones has a configurable maximum file size as dictated by the carriers. J.A. 7001. Dr. Sacerdoti agreed with Dr. Jones that the carrier requirements for image resolution were related to how an image is viewed on the screen. J.A. 7000. He also agreed that the carrier requirements for image resolution were not transmission requirements. *Id*.

Both parties were fully heard on this issue, and there exists legally sufficient evidentiary basis for a reasonable jury to find for Summit on this issue. This evidence supports the jury's verdict finding that Samsung's accused devices perform the methods of the asserted claims.

Thus, the district court did not err in denying Samsung's JMOL with respect to infringement.

# C. Invalidity

At trial, Samsung argued that the '482 patent was invalid as anticipated by the prior art reference Mattes. After the jury returned its verdict finding the five assert-

ed claims of the '482 patent not invalid and infringed, the district court denied Samsung's pre-verdict JMOL of invalidity.

Samsung argues that the evidence does not support the jury's verdict that the '482 patent is not invalid. Samsung argues that it presented clear and convincing evidence of invalidity. We disagree.

A party challenging the validity of a patent must establish invalidity by clear and convincing evidence. See Microsoft Corp. v. i4i Ltd. — U.S. —, 131 S. Ct. 2238, 2242 (2011). Anticipation is a factual question that we review for substantial evidence when appealed from a jury verdict. SynQor, Inc. v. Artesyn Techs., Inc., 709 F.3d 1365, 1373 (Fed. Cir. 2013). A claim is anticipated only if each and every element is found within a single prior art reference, arranged as claimed. See NetMoneyIN, Inc. v. VeriSign, Inc., 545 F.3d 1359, 1369 (Fed. Cir. 2008).

The jury heard evidence from Summit's expert, Dr. Jones, that at least one element of each asserted claim was missing from that reference. At trial, Dr. Jones focused his testimony regarding the prior art Mattes patent on the pre-processing requirements of the '482 patent. Specifically, Dr. Jones testified that Mattes fails to disclose limitation (b) of claim 38: "one or more pre-processing parameters controlling said client device in a placement of said digital content into a specified form." Dr. Jones testified that in Mattes it is the server—not the client device—that contains the software for pre-processing the image and that Mattes does not disclose performing the image analysis on the client device. J.A. 7271, 7273.

The jury heard expert testimony from both sides. The jury verdict is supported by substantial evidence, and we have no cause to disturb it. Thus, the district court did not err in denying Samsung's JMOL with respect to invalidity.

# D. Expert Testimony

Samsung appeals the district court's denial of Samsung's JMOL motion to exclude Mr. Benoit's testimony. Samsung contends that Mr. Benoit's analysis fails the standards set forth by Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993). First, Samsung argues that Mr. Benoit's methodology was unpublished, created specifically for this litigation, and never before employed by Mr. Benoit or by another expert. Second, Samsung argues that Mr. Benoit's "premise ... that a feature's use is proportional to its value" was incorrect and contradicted by other expert testimony. Defendant-Appellant's Opening Br. at 6. Third, Samsung questions the reliability of Mr. Benoit's use of surveys because Mr. Benoit is not a survey expert and failed to take the basic steps required of a secondary expert who purports to give an opinion based on a third party's survey.

Summit responds that Mr. Benoit's analysis was not "novel and untested" because it was within the framework of *Georgia–Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116 (S.D.N.Y. 1970). Summit contends that Mr. Benoit was not a secondary expert, but a primary expert, because he "simply used Samsung's surveys in his *Georgia-Pacific* analysis." Plaintiff-Cross-Appellant's Br. at 51.

Whether proffered evidence is admissible at trial is a procedural issue not unique to patent law, and we therefore review the district court's decision to admit expert testimony under the law of the regional circuit, here the Fifth Circuit. *Micro Chem., Inc. v. Lextron, Inc.*, 317 F.3d 1387, 1390-91 (Fed. Cir. 2003) (citing *Bose Corp. v. JBL, Inc.*, 274 F.3d 1354, 1360 (Fed. Cir. 2001)). The Fifth Circuit reviews the admissibility of expert testimony for abuse of discretion. *Primrose Operating Co. v. Nat'l Am. Ins. Co.*, 382 F.3d 546, 561 (5th Cir. 2004) (citing *Vogler v. Blackmore*, 352 F.3d 150, 154 (5th Cir. 2003)). The ques-

tion here, therefore, is whether the district court abused its discretion in deciding that Summit's expert testimony was admissible. We conclude that it did not.

In Daubert, the Supreme Court set out the requirements for admissibility of expert testimony. 509 U.S. 579 (1993). The Supreme Court stated that the trial judge plays a "gatekeeping role," id. at 597, which "entails a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue." Id. at 592-93. The Court emphasized that the focus "must be solely on principles and methodology, not on the conclusions that they generate." Id. at 595. This admissibility assessment, while a flexible one, may consider the following factors: (1) whether the methodology is scientific knowledge that will assist the trier of fact; (2) whether the methodology has been tested; (3) whether the methodology has been published in peer-reviewed journals; (4) whether there is a known, potential rate of error; and (5) whether the methodology is generally accepted. *Id.* at 591-95.

The admissibility of expert evidence is also governed by Rules 702 and 703 of the Federal Rules of Evidence. "Rule 702 was amended in response to *Daubert* and cases applying it, including *Kumho Tire*." *Micro Chem.*, 317 F.3d at 1391 (citing *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 150 (1999)). Rule 702 states:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

(a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;

- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

# Fed. R. Evid. 702. Rule 703 states:

An expert may base an opinion on facts or data in the case that the expert has been made aware of or personally observed. If experts in the particular field would reasonably rely on those kinds of facts or data in forming an opinion on the subject, they need not be admissible for the opinion to be admitted. But if the facts or data would otherwise be inadmissible, the proponent of the opinion may disclose them to the jury only if their probative value in helping the jury evaluate the opinion substantially outweighs their prejudicial effect.

# Fed. R. Evid. 703.

Under these rules, a district court may exclude evidence that is based upon unreliable principles or methods, legally insufficient facts and data, or where the reasoning or methodology is not sufficiently tied to the facts of the case. See, e.g., Kumho Tire, 526 U.S. at 150 (the gatekeeping inquiry must be tied to the particular facts of the case); i4i Ltd. v. Microsoft Corp., 598 F.3d 831, 854 (Fed. Cir. 2010) (stating that "Daubert and Rule 702 are safeguards against unreliable or irrelevant opinions, not guarantees of correctness"). But the question of whether the expert is credible or the opinion is correct is generally a question for the fact finder, not the court. Apple Inc. v. Motorola, Inc., 757 F.3d 1286, 1314 (Fed. Cir. 2014), overruled en banc in part not relevant here, Williamson v. Citrix Online, LLC, 792 F.3d 1339, 1349 (Fed. Cir. 2015). Indeed, "[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." *Daubert*, 509 U.S. at 596.

This court has recognized that estimating a reasonable royalty is not an exact science. The record may support a range of reasonable royalties, rather than a single value. Likewise, there may be more than one reliable method for estimating a reasonable royalty. *Apple*, 757 F.3d at 1315. A party may use the royalty rate from sufficiently comparable licenses, value the infringed features based upon comparable features in the market-place, or value the infringed features by comparing the accused product to non-infringing alternatives. *Id.* A party may also use what this court has referred to as "the analytical method," focusing on the infringer's projections of profit for the infringing product. *Lucent Techs.*, 580 F.3d at 1324.

All approaches have certain strengths and weaknesses, and, depending upon the facts, one or all may produce admissible testimony in a particular case. Because each case presents unique circumstances and facts, it is common for parties to choose different, reliable approaches in a single case and, when they do, the relative strengths and weaknesses of each approach may be exposed at trial or attacked during cross-examination. That one approach may better account for one aspect of a royalty estimation does not make other approaches inadmissible.

In sum, while all approximations involve some degree of uncertainty, the admissibility inquiry centers on whether the methodology employed is reliable. *Daubert*, 509 U.S. at 589-595. A distinct but integral part of that inquiry is whether the data utilized in the methodology is sufficiently tied to the facts of the case. *Kumho Tire*, 526 U.S. at 150. Hence, a reasonable or scientifically valid methodology is nonetheless unreliable where the data

used is not sufficiently tied to the facts of the case. See, e.g., LaserDynamics, Inc. v. Quanta Computer, Inc., 694 F.3d 51, 78-81 (Fed. Cir. 2012) (granting a new trial because damages testimony relied upon licenses that were not comparable and therefore not relevant). Likewise, ideal input data cannot save a methodology that is plagued by logical deficiencies or is otherwise unreasonable. See Daubert, 509 U.S. at 592-93 (the court must make "a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue) (emphasis added). But where the methodology is reasonable and its data or evidence are sufficiently tied to the facts of the case, the gatekeeping role of the court is satisfied, and the inquiry on the correctness of the methodology and of the results produced thereunder belongs to the factfinder.

To estimate a reasonable royalty rate in this case, Mr. Benoit started by estimating that the carriers pay Samsung \$14.15 to include a camera component in Samsung's phones. J.A. 6372. To arrive at this estimate, Mr. Benoit used Samsung's annual reports, internal cost and revenue spreadsheets, and interrogatory responses to determine that the camera component accounted for 6.2% of the phone's overall production cost. J.A. 6374. Accordingly, he attributed 6.2% of Samsung's revenue from selling each phone—i.e., \$14.15—to the camera's functionality. J.A. 6374.

To apportion the camera-related revenue further, Mr. Benoit estimated the percentage of camera users who used the camera to perform the infringing methods rather than for other purposes. To do this, he relied on surveys commissioned by Samsung in the ordinary course of its business and on another survey he found on his own. J.A. 6374-75. The surveys were conducted by J.D. Power and Associates, Pugh Research, Forrester, and ComScore. J.A. 6375. Using the surveys, Mr. Benoit estimated that

at least 65.3% of camera users used the camera regularly to capture only photos rather than video. J.A. 6377-79. He calculated that at least 77.3% of those users who captured only photos shared the photos, and that at least 41.2% of those users who shared the photos did so by MMS rather than by email or web storage. J.A. 6379-84. Lastly, Mr. Benoit observed that 100% of those photos shared by MMS were resized. J.A. 6384. Multiplying these percentages together, Mr. Benoit thus estimated that at least 20.8% of camera users utilized the camera for the infringing features rather than for other camera-related features.

Based on these usage statistics, Mr. Benoit concluded that 20.8% of Samsung's \$14.15 revenue for including the camera component in each phone—i.e., \$2.93—was due to the infringing features. J.A. 6386. Using Samsung's annual reports to estimate its profit margins and capital asset contributions, Mr. Benoit concluded that \$0.56 of the \$2.93 revenue was profit attributable to the infringement. J.A. 6386-89.

Mr. Benoit testified that to determine a reasonable royalty at a hypothetical negotiation, the parties would focus on allocating the \$0.56 benefit Samsung gained by utilizing the patented features. Mr. Benoit testified that the negotiation would concern the entire \$0.56 benefit because Samsung had no non-infringing alternatives, and the entire benefit was therefore incremental profit from using the patent. J.A. 6390. Mr. Benoit testified that because neither party had a stronger negotiating position, the parties would have split the \$0.56 evenly to derive a reasonable royalty of \$0.28 per device. J.A. 6389-91, 6395. Mr. Benoit cited three academic articles and the Nash Bargaining Solution to support his theory of an even

split.<sup>3</sup> Based on the per-device royalty and on the number of infringing devices sold by Samsung, Mr. Benoit estimated that a hypothetical negotiation would have resulted in a reasonable royalty of \$29 million. J.A. 6398.

In *Daubert*, The Supreme Court has delineated certain factors to assist courts in evaluating the foundation of a given expert's testimony, while carefully emphasizing the non-exhaustive nature of these factors. Suggested considerations include whether the theory or technique the expert employs is generally accepted, whether the theory has been subjected to peer review and publication, whether the theory can and has been tested, whether the known or potential rate of error is acceptable, and whether there are standards controlling the technique's operation. As the Fifth Circuit has noted, "[t]here is no formula, and the court must judge admissibility based on the particular facts of the case." *Wells v. SmithKline Beecham Corp.*, 601 F.3d 375, 378-79 (5th Cir. 2010).

The Supreme Court has called the inquiry envisioned by Rule 702 a "flexible one" and indicated that these factors may be considered, but are not exhaustive. Daubert, 509 U.S. at 594. The Fifth Circuit has held expert testimony admissible even though multiple Daubert factors were not satisfied. See, e.g., United States v. Norris, 217 F.3d 262, 269-71 (5th Cir. 2000). Still, the Supreme Court has warned that we must not "deny the importance of Daubert's gatekeeping requirement. The objective of that requirement is to ensure the reliability and relevancy of expert testimony." Kumho Tire, 526 U.S. at 152.

<sup>&</sup>lt;sup>3</sup> On appeal, Samsung does not challenge Mr. Benoit's use of Nash Bargaining.

In this case, Mr. Benoit's damages methodology was based on reliable principles and was sufficiently tied to the facts of the case. Mr. Benoit first estimated Samsung's economic benefit from infringement by specifically focusing on the infringing features and by valuing those infringing features based on Samsung's own data regarding use and on its own financial reports outlining production costs and profits. Mr. Benoit then envisioned a hypothetical negotiation in which the parties would have bargained for respective shares of the economic benefit, given their respective bargaining positions and alternatives to a negotiated agreement. Mr. Benoit's methodology was structurally sound and tied to the facts of the case.

That Mr. Benoit's methodology was not peer-reviewed or published does not necessitate its exclusion. We recognize that the fact-based nature of Mr. Benoit's damages testimony made it impractical, if not impossible, to subject the methods to peer review and publication. But "[p]ublication . . . is not a sine qua non of admissibility," and "in some instances well-grounded but innovative theories will not have been published." Daubert, 509 U.S. at 593. Consequently, "[w]here an expert otherwise reliably utilizes scientific methods to reach a conclusion, lack of textual support may go to the weight, not the admissibility of the expert's testimony." Knight v. Kirby Inland Marine Inc., 482 F.3d 347, 354 (5th Cir. 2007) (internal quotation marks omitted).

Samsung argues that Mr. Benoit's "premise . . . that a feature's use is proportional to its value" was incorrect and contradicted by expert testimony. Defendant-Appellant's Opening Br. at 6. But as we noted in *Lucent*, "an invention used more frequently is generally more valuable than a comparable invention used infrequently" and "frequency of expected use and predicted value are related." 580 F.3d at 1333. There is no dispute that use of the claimed invention is relevant under *Georgia-Pacific*:

Georgia-Pacific factor 11 looks at use of the invention and at evidence probative of the value of that use. Here, the district court did not abuse its discretion in determining that Mr. Benoit's methodology, involving the correlation of use with value, was not unreliable.

Samsung's argument that Mr. Benoit was unqualified to rely on survey data compiled by third parties is also not persuasive. As the district court held, Mr. Benoit need not be a survey expert to testify about the information compiled by third-party surveys, so long as the information is of a type reasonably relied upon by experts in the field to form opinions upon the subject.

To the extent Mr. Benoit's credibility, data, or factual assumptions have flaws, these flaws go to the weight of the evidence, not to its admissibility. Once an expert has been qualified, the trial court's gatekeeping inquiry focuses on the expert's methodology and on whether the methodology is sufficiently tied to the facts of the case. Where the methodology is sound and the evidence relied upon is sufficiently related to the case, disputes over the expert's credibility or over the accuracy of the underlying facts are for the jury. See i4i, 598 F.3d at 852. Here, Samsung cross-examined Mr. Benoit and, ultimately, the jury evaluated Mr. Benoit's opinions.

In sum, Samsung has not shown that the district court abused its discretion in allowing Mr. Benoit to testify regarding his apportionment methodology.

### E. Damages

In its JMOL motion, Samsung argued that the jury's damages award of \$15 million is not supported by substantial evidence. Samsung now argues that Mr. Benoit's analysis was flawed and that it should not have been admitted, and therefore cannot support the damages verdict. Samsung also argues that the Facebook and RIM

settlement agreements cannot support the damages award because they are not sufficiently comparable. Samsung argues there was no testimony at trial indicating that the Facebook license was comparable or relevant in any way to what a reasonable royalty would have been in this case. Further, Samsung argues that the RIM license, alone, is insufficient to support the jury's damages award. Thus, Samsung concludes that substantial evidence does not support the jury's damages award. We disagree.

35 U.S.C. § 284 provides that upon a finding of infringement, "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." This court has held that a reasonable method for determining a reasonable royalty is the hypothetical negotiation approach, which "attempts to ascertain the royalty upon which the parties would have agreed had they successfully negotiated an agreement just before infringement began." *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1324 (Fed. Cir. 2009).

Samsung is correct that Summit failed to present evidence that the Facebook license was comparable or relevant to calculating a reasonable royalty in this case. Because neither Summit's brief nor our independent review of Mr. Benoit's testimony shows otherwise, we do not address the Facebook license further.

The damages evidence presented by Summit at trial included Mr. Benoit's testimony regarding the apportionment methodology and the RIM license agreement. In its brief, Samsung conflates the issue of whether the RIM license should have been excluded with whether the license supported the jury's damages verdict. See Appellants' Op. Br. at 65-67. Samsung does not challenge the admission of the RIM license, and we therefore consider only the issue of whether substantial evidence supports

the jury's verdict, in view of the RIM license and Mr. Benoit's testimony.

Mr. Benoit's testimony and the RIM license supported the jury's damages verdict. Mr. Benoit testified that the RIM license conveys rights to the '482 patent and that both RIM and Samsung are similarly situated because both sell camera phones containing the accused MMS functionality. J.A. 6394, 6482-83. The jury also heard evidence regarding the royalty amount in the RIM license and about Samsung's sales volume in comparison to RIM's. J.A. 6394-95. The RIM license was therefore sufficiently relevant to a hypothetical negotiation, and in conjunction with Mr. Benoit's testimony, it provided substantial evidence supporting the jury's damages verdict.

We agree with the district court that the jury verdict was supported by sufficient evidence and tied to the facts of this case. We therefore affirm the district court's denial of Samsung's motion for judgment as a matter of law of no damages.

# F. Lump Sum

Summit cross-appeals, challenging the district court's determination that the jury verdict represents an amount of a lump-sum license through the life of the patent and compensates Summit for both past and future infringement. Summit argues that the jury's award cannot be a lump sum through the life of the patent because the relevant evidence, arguments, and instructions, and the verdict form were all limited to damages for past infringement. Summit also argues that its equitable claim for future damages is not an issue for the jury. Thus, Summit concludes that it is entitled to recover damages for future infringement. We disagree.

This court has not directly addressed whether a jury can award lump-sum damages through the life of the

We have, however, permitted such relief. Telcordia Techs., Inc. v. Cisco Sys., Inc., 612 F.3d 1365, 1378 (Fed. Cir. 2010), the district court rejected the defendant's argument that the jury's damages award was necessarily a lump-sum award intended to compensate the patentee for past and future infringement, reasoning that the evidence at trial provided no way of knowing what the jury actually did. Telcordia, 592 F. Supp. 2d 727, 747 n.8 (D. Del. 2009), aff'd in part, vacated in part, 612 F.3d 1365 (Fed. Cir. 2010). When the defendant appealed the district court's order granting the patentee equitable relief in the form of an ongoing royalty, this court affirmed, reasoning that the court did not abuse its "broad discretion" in interpreting the verdict form because the verdict form was ambiguous, neither party had proposed the jury's exact \$6.5 million award, and it was "unclear whether the jury based its award on a lump-sum, paid-up license, running royalty, some variation or combination of the two, or some other theory." Telcordia, 612 F.3d at 1378.

Similarly, in Whitserve, LLC v. Computer Packages, Inc., 694 F.3d 10, 35-38 (Fed. Cir. 2012), this court vacated and remanded the district court's denial of supplemental damages for infringement after the verdict but before final judgment was entered because the court had failed to explain its reasons for denying such damages. This court rejected the defendant's argument that the patentee's supplemental damages request was properly denied because the jury had necessarily awarded a lumpsum license for all past and future infringement. Id. at 38. This court noted that "nothing in the record would support" that conclusion because "the parties limited their damages arguments to past infringement rather than projected future infringement" and the "jury's verdict did not indicate that the award was meant to cover future use of [plaintiff's] patents[.]" Id. at 35.

In this case, the district court properly denied Summit's request for an ongoing royalty because the jury award compensated Summit for both past and future infringement through the life of the patent. Samsung's expert, Mr. Martinez, testified that a lump-sum award was appropriate. J.A. 7089-90. He also testified regarding the weight the jury should give the license agreements introduced into evidence, all of which were lump-sum licenses. Moreover, Summit's expert, Mr. Benoit, admitted that a lump-sum award would compensate Summit through the life of the patent. J.A. 6452, 6479-80. When the jury returned its verdict, it indicated on the verdict form that the award was a lump sum by writing "lump sum" on the verdict form. We see no basis to disturb the district court's determination and hold that the district court did not abuse its discretion in denying Summit's request for an ongoing royalty.

#### III. CONCLUSION

For each of the reasons stated above, we affirm the district court's claim construction of "being provided to," affirm the infringement and invalidity verdicts, affirm the district court's determination regarding the admissibility of Summit's damages expert's testimony, affirm the district court's determination regarding the damages award, and affirm the determination of the district court that Summit is not entitled to a running royalty.

# **AFFIRMED**