

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION**

ERICSSON INC., ET AL.,

Plaintiffs,

vs.

D-LINK SYSTEMS, INC., ET AL.,

Defendants.

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CASE NO. 6:10-CV-473

MEMORANDUM OPINION AND ORDER

Before the Court are the following motions:

- Ericsson’s Motion for a Compulsory Future Royalty and Pre-Judgment and Post-Judgment Interest (Docket No. 527);
- Defendants’ Rule 50(b) Renewed Motion for Judgment as a Matter of Law in Favor of Defendants (Non-Infringement and Invalidity) and Motion for a New Trial (Docket No. 528);
- Defendants’ Renewed Motion for Judgment as a Matter of Law on Ericsson’s Damages Claims or, in the Alternative, for Vacatur, Remittitur or a New Trial on Damages (Docket No. 529);
- Defendants’ Post-Trial Proposed Findings of Fact and Conclusions of Law (Docket No. 539);
- Defendants’ Motion for Judgment on Post-Trial Proposed Findings of Fact and Conclusions of Law (Docket No. 588); and
- Ericsson’s Motion to Supplement the Record (Docket No. 589).

For the reasons stated below, Ericsson’s Motion for a Compulsory Future Royalty and Pre-Judgment and Post-Judgment Interest (Docket No. 527) is **GRANTED**. Defendants’ Rule 50(b) Renewed Motion for Judgment as a Matter of Law in Favor of Defendants (Non-Infringement

and Invalidity) and Motion for a New Trial (Docket No. 528) is **DENIED**. Defendants' Renewed Motion for Judgment as a Matter of Law on Ericsson's Damages Claims or, in the Alternative, for Vacatur, Remittitur or a New Trial on Damages (Docket No. 529) is **DENIED**. Defendants' Motion for Judgment on Post-Trial Findings of Fact and Conclusions of Law (Docket No. 588) is **GRANTED** as set forth below. Ericsson's Motion to Supplement the Record (Docket No. 589) is **GRANTED**. All other pending motions in this case are **DENIED**.

I. Background

Plaintiffs Ericsson Inc. and Telefonaktiebolaget LM Ericsson (collectively "Ericsson") brought this infringement action against the following Defendants: D-Link Systems, Inc. ("D-Link"); Netgear, Inc. ("Netgear"); Belkin International, Inc. ("Belkin"); Acer, Inc. and Acer America Corp. ("Acer"); Gateway, Inc ("Gateway"); Dell, Inc ("Dell"); Intel Corp.¹ ("Intel"); and Toshiba, Inc. ("Toshiba"). Ericsson alleged infringement of the following patents: 6,772,215 (the "'215 Patent"); 6,330,435 (the "'435 Patent"); 6,466,568 (the "'568 Patent"); 6,424,625 (the "'625 Patent"); and 6,519,223 (the "'223 Patent). Ericsson also alleged Defendants' infringement was willful. Defendants alleged they did not infringe, and that the '435 and '625 Patents were invalid based on anticipation.

The Court conducted an eight day jury trial in June 2013, resulting in the following infringement verdict:²

¹ Intel intervened in the case (Docket No. 205), and Ericsson amended its complaint to include Intel as a Defendant. *See* Docket No. 249.

² "Yes" means the jury found the Claim infringed; "no" means the jury found the Claim not infringed. Ericsson only asserted Claim 11 of the '223 Patent against Acer/Gateway, Dell, Toshiba, and Intel. Ericsson only asserted Claim 5 of the '568 Patent against D-Link, Netgear, and Belkin.

	D-Link	Netgear	Belkin	Acer/Gateway	Dell	Toshiba	Intel
'568 Patent							
Claim 1	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Claim 5	Yes	Yes	Yes	N/A	N/A	N/A	N/A
'625 Patent							
Claim 1	Yes	Yes	Yes	Yes	Yes	Yes	Yes
'435 Patent							
Claim 1	No	No	No	No	No	No	No
Claim 2	No	No	No	No	No	No	No
'215 Patent							
Claim 1	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Claim 2	Yes	Yes	Yes	Yes	Yes	Yes	Yes
'223 Patent							
Claim 11	N/A	N/A	N/A	No	No	No	No

Docket No. 508 at 2–3. The jury also determined the ‘625 and ‘435 Patents were not invalid, and it found damages of \$435,000 for D-Link, \$3,555,000 for Netgear, \$1,170,000 for Acer/Gateway, \$1,920,000 for Dell, \$2,445,000 for Toshiba, and \$600,000 for Belkin. *Id.* at 4–5. The Court bifurcated willfulness into a separate portion of the trial, conducted after the jury reached its infringement/validity verdict. The jury found that Ericsson failed to prove willful infringement. Docket No. 510.

II. Defendants' Rule 50(b) Renewed Motion for Judgment as a Matter of Law in Favor of Defendants (Non-Infringement and Invalidity) and Motion for New Trial (Docket No. 528)

In this motion, Defendants challenge nearly every aspect of the infringement and invalidity portions of the case. First, Defendants contend Ericsson did not present sufficient evidence of direct infringement of the '215, '568, and '625 Patents. Next, Defendants contend Ericsson did not present sufficient evidence that any Defendant infringed the asserted method claims. Next, Defendants contend there was no evidence of indirect infringement. Finally, Defendants contend the jury erred in finding the '625 and '435 Patents not invalid.

A. Judgment as a matter of law and new trial standards

Judgment as a matter of law is only appropriate when “a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue.” FED. R. CIV. P. 50(a)(1). “The grant or denial of a motion for judgment as a matter of law is a procedural issue not unique to patent law, reviewed under the law of the regional circuit in which the appeal from the district court would usually lie.” *Finisar Corp. v. DirectTV Grp., Inc.*, 523 F.3d 1323, 1332 (Fed. Cir. 2008). The Fifth Circuit “uses the same standard to review the verdict that the district court used in first passing on the motion.” *Hiltgen v. Sumrall*, 47 F.3d 695, 699 (5th Cir. 1995). Thus, a jury verdict must be upheld, and judgment as a matter of law may not be granted, unless “there is no legally sufficient evidentiary basis for a reasonable jury to find as the jury did.” *Id.* at 700. The jury’s verdict must also be supported by “substantial evidence” in support of each element of the claims. *Am. Home Assurance Co. v. United Space Alliance*, 378 F.3d 482, 487 (5th Cir. 2004).

A court reviews all evidence in the record and must draw all reasonable inferences in favor of the nonmoving party. *See Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 150–51 (2000). However, a court may not make credibility determinations or weigh the

evidence, as those are solely functions of the jury. *Id.* The moving party is entitled to judgment as a matter of law “only if the evidence points so strongly and so overwhelmingly in favor of the nonmoving party that no reasonable juror could return a contrary verdict.” *Int’l Ins. Co. v. RSR Corp.*, 426 F.3d 281, 296 (5th Cir. 2005).

Under Federal Rule of Civil Procedure 59, a new trial may be granted to any party to a jury trial on any or all issues “for any reason for which a new trial has heretofore been granted in an action at law in federal court.” “A new trial may be granted, for example, if the district court finds the verdict is against the weight of the evidence, the damages awarded are excessive, the trial was unfair, or prejudicial error was committed in its course.” *Smith v. Transworld Drilling Co.*, 773 F.2d 610, 612–13 (5th Cir. 1985).

B. Direct Infringement

i. Applicable Law

To prove infringement, the plaintiff must show the presence of every element or its equivalent in the accused device. *Lemelson v. United States*, 752 F.2d 1538, 1551 (Fed. Cir. 1985). Determining infringement is a two-step process. First, the claim must be properly construed to determine its scope and meaning. Second, the construed claim must be compared to the accused device or process. *Absolute Software, Inc. v. Stealth Signal, Inc.*, 659 F.3d 1121, 1129 (Fed. Cir. 2011) (citing *Carroll Touch, Inc. v. Electro Mech. Sys., Inc.*, 15 F.3d 1573, 1576 (Fed. Cir. 1993)). “A determination of infringement is a question of fact that is reviewed for substantial evidence when tried to a jury.” *ACCO Brands, Inc. v. ABA Locks Mfr. Co.*, 501 F.3d 1307, 1311 (Fed. Cir. 2007).

ii. The ‘215 Patent

Claim 1 of the ‘215 Patent contains the following limitation:

Responsive to the receiving step, constructing a message field for a second data unit, said message field including a type identifier field.

‘215 Patent, Claim 1, at 10:25–27. The Court construed the phrase to mean “responsive to the receiving step, generating a message field including a field that identifies the message type of the feedback response message *from a number of different message types*.” Docket No. 341 at 9 (emphasis added). Defendants contend they do not infringe because their products only transmit one type of feedback response message. Because their products only transmit one type of message, their feedback response messages are not identified from “a number of different message types.”

Ericsson relied on the BlockAck Control field within the 802.11n standard to satisfy the type identifier field limitation. *See* Docket No. 528 at 5. The BlockAck Control field relates to communications between a transmitter and a receiver. Pursuant to the 802.11n standard, the receiver sends feedback response messages to the transmitter indicating which packets the receiver has already received. The standard contains three different types of feedback responses: Basic BlockAck, Compressed BlockAck, and Multi-TID BlockAck. Each response type has a two-digit identifier to indicate which of the three variants is being used.³ Ericsson’s expert (Dr. Nettles) testified that these two-digit identifiers satisfy the type identifier field limitation because they indicate which of the three types of feedback responses is contained in a particular message.

The issue at trial (and in Defendants’ post-trial briefing) is Defendants’ products only use Compressed BlockAck feedback response messages. Defendants contend their products do not have the ability transmit Basic BlockAck or Multi-TID BlockAck responses, so they cannot satisfy the “number of different message types” requirement. Docket No. 528 at 5. Defendants believe the element of “choice” is critical to satisfying the asserted Claims, and they assert that

³ For example, the identifier for Compressed BlockAck is 01. *See* Docket No. 581 at 9.

their receivers are incapable of choosing which type of feedback response message is transmitted because they always transmit responses in Compressed BlockAck form. *Id.* at 6.

Defendants also contend Ericsson cannot satisfy the asserted Claims by arguing Defendants' engineers chose which feedback response type to transmit when designing the product. *Id.* at 9. Instead, Defendants contend the "choice" must be made by the receiver in real-time while in operation. *Id.* at 10. Defendants argue any other result would vitiate the "from a number of different message types" limitation. Docket No. 592 at 2. According to Defendants, if Ericsson's infringement evidence is sufficient, the Claim scope would be identical regardless of whether the "number of different message types" language was included. *Id.*

Ericsson makes three arguments in support of the jury's infringement verdict. First, it argues Defendants previously conceded infringement was a factual matter for the jury. Docket No. 581 at 3. About a week before trial, Defendants filed a Motion for Confirmation of the Court's Claim Construction. *See* Docket No. 448. In that motion, Defendants sought confirmation that a device "where only one type of message is available" could not meet the "from a number of different types" limitation. *See id.* at 5. In its response, Ericsson stated its infringement theory—"even if the accused devices always choose to use a single Block ACK variant, they infringe the '215 Patent." Docket No. 460 at 6. Based on this statement from Ericsson, Defendants withdrew their motion. Docket No. 460. In their brief withdrawing the motion, Defendants stated "now that Ericsson has confirmed that it will not take a position inconsistent with the Court's claim construction or its assertions during the *Markman* proceedings, the only remaining issues appear to be disputes of fact." *Id.* at 4. Defendants further stated "Ericsson's allegations regarding the operation of Defendants' products...are issues of fact for the jury." *Id.* Ericsson contends Defendants should not be allowed to retreat from their

previous admission that infringement was a fact issue by now arguing Ericsson's trial evidence was legally insufficient. Docket No. 581 at 4–5.

Ericsson characterizes its second argument as a claim construction argument. Ericsson argues Defendants are adding a “selecting” limitation to the Claim. *Id.* at 3. Ericsson asserts there is no requirement that a receiver “select” between a number of different feedback response types. *Id.* Instead, the Court's construction only requires the receiver to “identif[y]” the response type. *Id.* at 4.

Third, Ericsson contends it presented legally sufficient evidence to support an infringement verdict. *Id.* at 8. Ericsson argues the 802.11n standard uses the type identifier field to distinguish between three different types of feedback responses. *Id.* Ericsson asserts that the type identifier field is mandatory, and Defendants' transmitters always check the type identifier field when receiving feedback response messages. *Id.* Thus, Ericsson argues it presented sufficient evidence for the jury to find infringement. *Id.*

There is no real dispute how Defendants' products operate; the only disputed issue is whether Defendants' one-message products could satisfy the “from a number of different message types” requirement. The jury determined they did, and there is substantial evidence to support their verdict.

There are three different types of feedback responses available in the 802.11n standard. 6/5/13 a.m. Tr. at 40:10–13 (Nettles). To distinguish between the different types of feedback responses, each message contains a type identifier. *Id.* at 39:6–16. Dr. Nettles testified that this type identifier in Defendants' products satisfied the type identifier field limitation. *Id.* at 41:16–42:5. Dr. Nettles stated that each accused product transmits a type identifier in each feedback response message. *Id.* at 42:6–16. Dr. Nettles confirmed this infringed the '215 Patent because it

indicates which type of message is transmitted, given a number of potential options. *Id.* at 41:24–42:3.

Defendants contend their products do not identify the message type from a number of different types because their products exclusively use Compressed Block Ack. However, this was an issue appropriately resolved by the jury. Dr. Gibson testified that the type identifier field is mandatory, and Defendants’ products all check the type identifier field to determine the type of message. *See* 6/10/13 p.m. Tr. at 19:4–11. Dr. Nettles further testified that Defendants’ products must include and check the type identifier field to ensure interoperability with other 802.11n-compliant products. *See* 6/5/13 a.m. Tr. at 43:3–5. Thus, even though Defendants’ products only use Compressed Block Ack, each feedback message *must* contain a type identifier bit, and each receiver *must* check the type identifier bit. *See* 6/11/13 a.m. Tr. at 104:17–24 (Nettles) (“And they need to transmit that because there’s a possibility that some other manufacturer will be transmitting some other value in that field, and they need to check that field to make sure that their products are processing BlockAcks that their products understand how to deal with. So it’s important to process that field, even though they don’t change it.”). The type identifier bit indicates the message is in Compressed Block Ack form, one of three available options in the 802.11n standard. 6/10/13 p.m. Tr. at 18:24–19:7 (Gibson). This was Ericsson’s infringement theory at trial, a theory the jury accepted, and there was substantial evidence to support it.

Much of Defendants’ JMOL briefing is an attempt to re-litigate claim construction positions rejected by both the Magistrate Judge and this Court. During claim construction, Defendants argued the “type identifier field” limitation should be construed as identifying the type of feedback response “that is *selected* from multiple *available* feedback responses.” Docket

No. 341 at 6 (emphasis added). The Magistrate Judge rejected Defendants' proposed construction because it improperly imported limitations from the specification. *Id.* at 8–9. Defendants objected to the Magistrate Judge's construction because it failed to include their proposed limitations, and this Court rejected their argument. *See* Docket No. 374 at 5 (“The claim language itself does not include the limitations Defendants urge, and narrowing the claims as Defendants wish would be inappropriate.”). Thus, there is no requirement the accused products “select” the type of feedback message or that there be multiple “available” types of messages. *Compare* 6/12/13 a.m. Tr. at 104:9–10 (“The multiple ACKs have to be available at the time of response.”) (Defendants' closing argument). It is sufficient that the products “identif[y]” the message type from “a number of different message types.” *See* Docket No. 341 at 9.

Defendants' motion for judgment as a matter of law that they do not infringe the '215 Patent is **DENIED**.

iii. The '568 Patent

Claim 1⁴ of the '568 Patent requires “a service type identifier which identifies a type of payload information.” The Court construed the phrase to mean “an identifier that includes the type of information conveyed in the payload. Examples of types of information include, but are not limited to, video, voice, data, and multimedia.”

Ericsson relied on the TID subfield value in the 802.11n standard to meet the service type identifier limitation. *See* 6/5/13 a.m. Tr. at 115:4–117:21 (Nettles). Each TID subfield contains an integer ranging from 0 to 7. *See* PX283 at 253. These eight integers map to four access categories: 1 and 2 correspond to AC_BK; 0 and 3 correspond to AC_BE; 4 and 5 correspond to

⁴ Ericsson asserted Claim 1 against all Defendants and Claim 5 against only the Router Defendants (D-Link, Netgear, and Belkin). *See* Docket No. 508. The jury found infringement of all asserted '568 Claims. *See id.* Claim 5 depends from Claim 1.

AC_VI; and 6 and 7 correspond to AC_VO. Each access category is assigned a further “designation,” which the 802.11n standard describes as “informative.” AC_BK is designated Background, AC_BE is designated Best Effort, AC_VI is designated Video, and AC_VO is designated Voice. These “informative” designations are central to the parties’ dispute. Defendants believe they do not infringe because the access category designations are not mandatory (i.e. voice data need not be designated “AC_VO” or “Voice”), while Ericsson asserts that Defendants infringe because their products are capable of using and in some instances actually use the “informative” classifications.

Defendants contend they do not infringe because the TID subfield does not identify the type of information contained in a packet’s payload. Docket No. 528 at 12. Instead, Defendants contend the TID subfield value is only used to prioritize packets for transmission. *Id.* at 13. Defendants presented evidence that different types of information can be assigned the same TID value, and the same type of information can be assigned different TID values. *Id.* Thus, Defendants believe the TID subfield does not meet the service type identifier limitation because the TID subfield does not identify the type of information conveyed in the packet. *Id.*

Further, Defendants argue their products do not infringe even though the TID subfield value *may* correspond to the type of information in the payload. *Id.* at 14. Defendants contend merely having the capability of identifying the type of information is insufficient. *Id.* Defendants assert there is no requirement in the 802.11n standard that certain TID values be used with certain types of information. *Id.* Therefore, even though TID values may be configured to match their descriptive designations, there is no infringement because TID values do not have to be configured to match their descriptive designations. *Id.*

Ericsson contends it presented sufficient evidence to support the jury's verdict. Docket No. 581 at 12. Ericsson argues when Defendants' products are used in accordance with the 802.11n standard, the TID value identifies the type of information in the payload. *Id.* at 13. In support, Ericsson cites internal Intel documents instructing customers to use TID values that match the type of data in the payload. *Id.* Further, Ericsson argues both Dr. Nettles and Dr. Gibson performed testing indicating where the TID values identified the type of data in the payload. *Id.* Ericsson argues this is sufficient evidence to support the jury's infringement verdict. *Id.*

Dr. Nettles testified that when devices are used in accordance with the 802.11n standard, the TID value identifies the type of information in the payload. 6/5/13 p.m. Tr. at 110:9–24; *see* 6/5/13 p.m. Tr. at 39:7–9 (noting the user can assign “any TID value that he or she chooses”). Dr. Nettles stated that while the categories were not mandatory, someone using the standard would actually use the given designations. 6/5/13 a.m. Tr. at 118:5–13; *see* 6/5/13 p.m. Tr. at 36:24–37:2 (“Q: So what they establish is how the system will treat them, not the kind of information conveyed in the payload? A: No, I can't agree with that in general.”). Further, Dr. Nettles provided several specific examples of products where the TID values match the type of information in the payload. *See* 6/5/13 a.m. Tr. at 123:10–15, 124:3–8, 124:16–22. There was also evidence Intel encouraged its customers to follow the TID subfield designations for video and voice. *See* PX514 at 65; 6/10/13 p.m. Tr. at 50:8–53:10 (Gibson).

At best, Defendants' evidence showed their products can be configured in a non-infringing manner. In particular, Dr. Gibson presented testing data demonstrating that a particular TID subfield was not required to match the content of the payload. *See* 6/10/13 a.m. Tr. at 117:23–120:13. Conversely, Dr. Nettles identified instances where the TID values matched

the payload content. *See* 6/5/13 a.m. Tr. at 123:10–15, 124:3–8, 124:16–22; 6/10/13 p.m. Tr. at 57:16–58:18 (Gibson). The jury was not required to find Dr. Gibson’s testing data more influential than Dr. Nettles’s product data.⁵ Further, even though the TID subfield classifications are not mandatory, they are still included in the 802.11n standard. *See* PX283 at 253. It was entirely logical for the jury to conclude that Defendants would choose to follow even the “informative” portions of the standard.

Defendants’ motion for judgment as a matter of law that they do not infringe the ‘568 Patent is **DENIED**.

iv. The ‘625 Patent

Claim 1 of the ‘625 Patent requires:

A transmitter in the data network *commanding a receiver* in the data network to a) receive at least one packet having a sequence number that is not consecutive with a sequence number of a previously received packet and b) release any expectation of receiving outstanding packets having sequence numbers prior to the at least one packet;

‘625 Patent, Claim 1, at 10:16–23 (emphasis added). Ericsson relied on transmitted data packets to satisfy the command to receive limitation. Dr. Nettles testified that data packets sent either individually (MPDUs) or aggregated (A-MPDUs) act as a command from the transmitter to the receiver to accept an out of sequence packet. Docket No. 528 at 16. Defendants contend this is insufficient evidence of a command to receive. *Id.* at 17. Defendants argue the normal operation of 802.11n receivers is to receive all packets, regardless of whether the packets are out of sequence. *Id.* Further, Defendants’ receivers receive all data packets the same—there is no

⁵ At the post-trial hearing, the Court repeatedly asked Defendants’ counsel why the specific instances identified by Dr. Nettles where the TID subfield matched the content of the data were not sufficient to support the jury’s verdict. Those questions were never directly answered. Instead, Defendants consistently reiterated their position that there could only be infringement if the TID subfield *was required* to match the type of data contained within it. This is not necessary to find infringement. *See z4 Techs., Inc. v. Microsoft Corp.*, 507 F.3d 1340, 1350 (Fed. Cir. 2007) (affirming an infringement verdict even though the accused products were capable of non-infringing modes of operation); *Golden Blount, Inc. v. Robert H. Peterson Co.*, 458 F.3d 1354, 1363 (Fed. Cir. 2006).

special process for receiving out of sequence packets. *Id.* at 18. Because all packets are received the same, there is no need for a command to receive. *Id.* at 19.

Additionally, Defendants contend Ericsson cannot rely on the data packets themselves as commands to receive. Docket No. 528 at 21. Defendants argue Ericsson did not present any evidence of 802.11n programming forcing receivers to receive out of sequence packets. *Id.* Therefore, there is no evidence to support the jury's finding of infringement. *Id.* Finally, Defendants argue Ericsson did not present any evidence that the steps of Claim 1 (a method claim) were actually performed. *Id.* at 22. Defendants cite testimony from Dr. Nettles that Defendants "program their devices to do these steps without human intervention." *Id.* Defendants believe this statement is insufficient to prove direct infringement because Ericsson never demonstrated anyone actually performed the claimed method. *See id.* (citing *Cybersettle, Inc. v. Nat'l Arbitration Forum, Inc.*, 243 Fed. Appx. 603, 607 (Fed. Cir. 2007)).

In a footnote, Defendants also contend Ericsson failed to present sufficient evidence that the accused products command a receiver to release any expectation of receiving outstanding packets having sequence numbers prior to the at least one packet. Docket No. 528 at 22, n.14. Defendants contend Ericsson failed to present any evidence the accused products send explicit BARs when a block acknowledgment is lost. *Id.* Likewise, Defendants assert that transmission of A-MPDUs does not meet the claim steps because A-MPDUs do not release expectation of receiving outstanding packets. *Id.*

Ericsson argues it presented substantial evidence of a command to receive out of sequence packets. Docket No. 581 at 17. Dr. Nettles testified that 802.11n receivers are programmed to treat all packets as commands to receive, so 802.11n-compliant products must receive all out of sequence packets. *Id.* Ericsson also contends the jury resolved Defendants'

semantic arguments in Ericsson's favor. *Id.* at 19. Because all packets must be received, Defendants contend this indicates 802.11n devices do not need a command to receive. *Id.* Ericsson believes the opposite is true. *Id.* Ericsson argues 802.11n devices receive all packets because of the command to receive. *Id.* Ericsson posits that this is a fact issue the jury was entitled to resolve, and did resolve, in Ericsson's favor. *Id.* Accordingly, there is substantial evidence to support the verdict. *Id.*

Regarding the "at least one packet" limitation, Ericsson first argues Defendants waived this argument. *Id.* at 21. Ericsson contends Defendants never presented this issue in their JMOL at trial, and they did not make any argument about it to the jury. *Id.* at 22. Second, Ericsson argues it presented substantial evidence this limitation was met. *Id.* at 21. Ericsson asserts it demonstrated that the accused products command a receiver to release any expectation of receiving outstanding packets when a receiver receives an A-MPDU. *Id.* at 22. When a receiver receives an A-MPDU, it shifts the window forward, releasing any expectation of packets before the window. *Id.* Ericsson contends this same function discards packets below the window, so it satisfies the referenced claim language. *Id.*

Dr. Nettles testified that 802.11n receivers treat MPDUs and A-MPDUs as commands to receive out of sequence packets. 6/5/13 a.m. Tr. at 80:4–10. Each receiver contains programming instructing it to treat out of sequence packets as commands to receive, so the receiver knows to accept the packets. *Id.* at 82:4–17. Because of this programming, 802.11n receivers accept all packets. *Id.* at 83:7–13. Dr. Nettles further testified that 802.11n receivers operate similarly to a preferred embodiment in the '625 Patent. *See* 6/11/13 a.m. Tr. at 108:5–11. The '625 Patent contains an embodiment where each transmitted packet contains an enforcement bit. *Id.* Dr. Nettles hypothesized that in the embodiment, the system could be configured so the enforcement

bit was always set to one. *Id.* If every enforcement bit was set to one, every packet would be a command to receive. *Id.* at 108:12–14. Dr. Nettles contends this is similar to the 802.11n system. *Id.* at 108:15–19. Since every “enforcement bit” is set to one, Defendants no longer need to transmit them. *Id.* However, every packet is still treated as a command to receive. *Id.*

Additionally, Dr. Nettles provided substantial testimony about the releasing expectations limitation. Dr. Nettles stated when a window of expected packets shifts, the receiver releases any expectation of receiving packets before the window. 6/5/13 a.m. Tr. at 87:14–17. Dr. Nettles presented two animations explaining how this occurred to the jury. *See id.* at 87:18–88:6. Dr. Nettles also testified that the receipt of an A-MPDU causes the window to shift. *Id.* at 92:6–15. This window shift causes the receiver to release expectation of receiving packets outside the window. *Id.*

Based on Dr. Nettles’s testimony, there is substantial evidence to support the jury’s verdict. Both sides presented competing evidence about the command to receive. Dr. Gibson testified that because 802.11n receivers accept all packets, there is no command to receive. *See* 6/10/13 a.m. Tr. at 30:14–24. Dr. Nettles testified that 802.11n receivers accept all packets *because* of the command to receive. *See* 6/5/13 p.m. Tr. at 57:3–5. This was a fact issue ripe for jury resolution, and there was substantial evidence to support their decision.

Defendants’ motion for judgment as a matter of law that they do not infringe the ‘625 Patent is **DENIED**.

v. Direct Infringement of Method Claims

Defendants argue Ericsson failed to present any evidence any Defendant infringed the asserted method claims. Docket No. 528 at 23. Defendants contend Ericsson’s only evidence of direct infringement of the method claims is a statement from Dr. Nettles that Defendants’ programming performs the asserted methods without user intervention. *Id.* at 24. Ericsson

counters that it introduced substantial evidence to support the jury's verdict. Ericsson argues a manufacturer can be liable for direct infringement of a method claim through use by its customers. Docket No. 581 at 24. Further, Ericsson asserts that it presented evidence showing Defendants' customers used the accused products without modification. *Id.* at 25. Therefore, Ericsson believes Defendants are liable for direct infringement for both making and selling the accused products. *Id.*

Ericsson presented substantial evidence that Defendants directly infringed the asserted method claims. A method claim is directly infringed when someone practices the patented method. *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 576 F.3d 1348, 1359 (Fed. Cir. 2009). A manufacturer can directly infringe a method claim if its products "automatically perform the disputed steps" without user modification. *See SiRF Tech., Inc. v. Int'l Trade Comm'n*, 601 F.3d 1319, 1331 (Fed. Cir. 2010) (finding direct infringement when the accused products automatically performed every step of a method claim). This is exactly the type of evidence Ericsson presented at trial. Dr. Nettles testified that the accused products perform the patented methods automatically without user intervention. *See* 6/5/13 a.m. Tr. at 25:7–11 ('215 Patent); 78:25–79:10 ('625 Patent). This is not an issue of joint infringement, as Defendants contend. *See* Docket No. 592 at 8. Rather, Ericsson presented evidence Defendants directly infringed by performing all the steps of the asserted claims.

There was substantial evidence to support the jury's infringement verdict of the method claims. Defendants' motion for judgment as a matter of law that they do not infringe the asserted method claims is **DENIED**.

C. Indirect Infringement

i. Applicable Law

Infringement is a question of fact that is reviewed for substantial evidence when tried to a jury. *Finisar Corp.*, 523 F.3d at 1332. Under 35 U.S.C § 271(b), a party is liable for infringement if it “actively induces infringement of a patent.” “In order to prevail on an inducement claim, the patentee must establish first that there has been direct infringement, and second that the alleged infringer knowingly induced infringement and possessed specific intent to encourage another's infringement.” *ACCO Brands*, 501 F.3d at 1312 (internal quotation marks omitted). Thus, to support a finding of inducement, there must be “evidence of culpable conduct, directed to encouraging another's infringement, not merely that the inducer had knowledge of the direct infringer's activities.” *DSU Med. Corp. v. JMS Co.*, 471 F.3d 1293, 1306 (Fed. Cir. 2006). Furthermore, “[t]he plaintiff has the burden of showing that the alleged infringer's actions induced infringing acts,” and that the infringer “knowingly induced infringement.” *Id.* at 1306. A party has the requisite knowledge if it knew “that the induced acts constitute patent infringement,” or was willfully blind to the infringement. A party is willfully blind if it believed there was a high probability that the acts constituted patent infringement and took deliberate steps to avoid learning of the infringement. *Global-Tech Appliances, Inc. v. SEB S.A.*, --- U.S. ---, 131 S. Ct. 2060, 2068, 2070 (2011); see *Smith & Nephew, Inc. v. Arthrex, Inc.*, 2013 U.S. App. LEXIS 1038, *10–12 (Fed. Cir. 2013).

A patentee may prove both indirect infringement and the underlying direct infringement by circumstantial evidence. See *Liquid Dynamics Corp. v. Vaughan Co.*, 449 F.3d 1209, 1219 (Fed. Cir. 2006). “There is no requirement that direct evidence be introduced, nor is a jury's preference for circumstantial evidence over direct evidence unreasonable per se.” *Id.* Moreover, “[t]he drawing of inferences, particularly in respect of an intent-implicating question . . . is

peculiarly within the province of the fact finder that observed the witnesses.” *Rolls-Royce Ltd. v. GTE Valeron Corp.*, 800 F.2d 1101, 1110 (Fed. Cir. 1986); *see also Fuji Photo Film Co. v. Jazz Photo Corp.*, 394 F.3d 1368, 1378 (Fed. Cir. 2005) (declining to disturb jury's verdict because intent to induce infringement “is a factual determination particularly within the province of the trier of fact”).

ii. Analysis

Defendants contend Ericsson failed to present sufficient evidence of indirect infringement for two reasons. First, Defendants believe Ericsson failed to prove direct infringement by Ericsson’s customers for all the reasons recited above. Docket No. 528 at 24. Second, Defendants argue no reasonable jury could have found they intended for their customers to infringe the asserted claims. *Id.* at 25. Defendants contend Ericsson’s proof regarding knowledge of infringement is lacking. *Id.* Defendants argue the evidence only demonstrated they were aware of Ericsson’s lawsuit; they were not aware their products actually infringed. *Id.* at 26. Defendants contend they have maintained reasonable and consistent positions regarding non-infringement and invalidity throughout this trial, so Ericsson failed to prove the knowledge requirement of induced infringement. *Id.* at 27. Additionally, Defendants contend Ericsson failed to present any evidence that Defendants manifested a specific intent to encourage their customer’s infringing acts. *Id.* at 28.

Ericsson argues its evidence was “more than sufficient” to support a finding of induced infringement. Docket No. 581 at 27. Ericsson cites eight different pieces of testimony, including testimony from Dr. Nettles, that operation in an infringing manner is “the whole reason for selling” Defendants’ products. *See id.* at 27–28. Ericsson also cites evidence that Defendants submitted their products for 802.11n compatibility testing, and they advertised their products’

802.11n compliance. *Id.* at 28. Ericsson believes this evidence “goes far beyond what has been found to be sufficient evidence to find inducement.” *Id.*

There was substantial evidence to support a verdict of induced infringement. First, Ericsson presented substantial evidence of direct infringement by Defendants’ customers.⁶ *See Akamai Techs., Inc. v. Limelight Networks, Inc.*, 692 F.3d 1301, 1308 (Fed. Cir. 2012) (en banc) (“There can be no indirect infringement without direct infringement.”). Dr. Nettles testified that end customers performed the patented methods when they used the accused products. 6/5/13 a.m. Tr. at 25:12–14. Ericsson also presented evidence that Defendants sold infringing units to end customers. *See* 6/6/13 a.m. Tr. at 10:21–12:2 (Bone). This is sufficient evidence to infer end customers used the infringing products. *See Liquid Dynamics*, 449 F.3d at 1219 (noting that a patentee may prove indirect infringement through circumstantial evidence).

Second, Ericsson presented substantial evidence Defendants “knowingly induced infringement and possessed specific intent to encourage another’s infringement.” *See Akamai Techs.*, 692 F.3d at 1308. The parties stipulated that Ericsson notified each Defendant of its infringement allegations before the suit was filed. 6/4/13 p.m. Tr. at 7:5–10:20; *see id.* at 7:1–4 (Petersson) (“Q: Did Ericsson contact each of the Defendants in this case about taking a license to Ericsson’s Wi-Fi patents? A: Yes, we did.”). After receiving notice, Defendants continued selling the accused products. *See* 6/6/13 a.m. Tr. at 11:18–21 (Bone). Dr. Nettles testified that Defendants’ accused products comply with the 802.11n standard, and the accused products automatically infringe without user intervention. 6/5/13 a.m. Tr. at 25:21–26:2. Ericsson also presented evidence Defendants advertise their 802.11n compliance. *See* 6/6/13 p.m. Tr. at 175:18–176:13 (McFarland) (describing testing by the Wi-Fi Alliance). Defendants submit their

⁶ Defendants also re-urge non-infringement arguments made previously in their Motion. *See* Docket No. 528 at 24. For the reasons set forth above, those arguments are without merit.

products for independent compliance testing, then indicate on their packaging the products are compliant. See 6/4/13 p.m. Tr. at 123:15–22, 130:18–136:17 (Nettles); 6/5/13 p.m. Tr. at 144:15–24 (Bone). Taken together, this is substantial evidence of “specific intent to encourage another’s infringement.” See *DSU Med.*, 471 F.3d at 1306.

Defendants’ motion for judgment as a matter of law regarding indirect infringement is **DENIED**.

D. Invalidity

i. Applicable Law

Patents are presumed valid, and overcoming this presumption requires clear and convincing evidence. *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1354 (Fed. Cir. 2010) (*en banc*). A patent claim is invalid as anticipated if the claimed invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention by the applicant. 35 U.S.C. § 102(a) (2006). Anticipation requires the presence in the prior art of each and every limitation of the claimed invention. *Amgen, Inc. v. Hoffman-La Roche Ltd.*, 580 F.3d 1340, 1366 (Fed. Cir. 2009).

ii. The ‘625 Patent

At trial, Defendants presented evidence that a submission to the European Telecommunications Standards Institute (“ETSI”) by Dietmar Petras anticipated Claim 1 of the ‘625 Patent. See DX120 (“Petras Reference” or “Petras”). Ericsson argued the Petras Reference did not disclose a command to receive, as required by Claim 1. Defendants now contend they presented clear and convincing evidence the Petras Reference disclosed a command to receive, as well as every other limitation in Claim 1.

Dr. Nettles testified at trial (and Ericsson argues now) that Petras was not anticipatory because it failed to show a command to receive an out of sequence packet. Docket No. 581 at 33. In particular, the discard message relied on by Defendants was not a command to receive; it was merely a notification the transmitter has discarded a packet. *Id.* Further, Ericsson contends Dr. Heegard admitted the Petras Reference did not need a command to receive. *Id.* at 34. Defendants contend their evidence demonstrates that in the Petras Reference, a discard message is a command to receive. Docket No. 592 at 9. Defendants argue the discard message forces the receiver to accept the packet to which the message is attached, but the receiver would not otherwise accept the packet. *Id.* at 9. Thus, Defendants believe the Petras Reference discloses every element of Claim 1. *Id.*

Anticipation of the '625 Patent presents a classic fact issue for the jury. At issue was whether a single reference disclosed a single limitation. Ericsson's expert testified it did not; Defendants' expert testified it did. After reviewing the evidence, the jury determined the Defendants failed to prove by clear and convincing evidence that the reference contained the limitation. Such a determination is squarely within the purview of the jury, and Defendants failed to present sufficient evidence to overturn the verdict. *See Palasota v. Haggard Clothing Co.*, 499 F.3d 474, 480 (5th Cir. 2007); *The Johns Hopkins Univ. v. Datascope Corp.*, 543 F.3d 1342, 1344 (Fed. Cir. 2008).

Dr. Nettles testified the Petras discard message in was not a command to receive. 6/11/13 a.m. Tr. at 99:23–100:2. According to Dr. Nettles, the only effect of the Petras discard notice is to shift the window of anticipated packets. *Id.* at 100:7–11. However, shifting the window has no impact on whether out of sequence packets are received. *Id.* at 100:12–14. Further, Dr. Nettles testified there was “definitely no disclosure” in the Petras Reference indicating a discard notice

was a command to receive. *Id.* at 100:15–21; *see* 6/11/13 p.m. Tr. at 17:20–24 (Nettles) (“Q: And that’s what they said—and that’s what Dr. Heegard said represented a command to receive, right? A: That’s what he identified. I don’t agree with him.”).

Dr. Heegard testified the discard message in Petras was a command to receive. *See* 6/10/13 p.m. Tr. at 142:22–143:15. According to Dr. Heegard, the Petras discard message acts like the enforcement bit in the ‘625 Patent, and it commands a receiver to accept out of sequence packets. *See id.* Ericsson presented evidence that Dr. Heegard’s position conflicted with the analysis of Dr. Gibson, Defendants’ non-infringement expert. Ericsson cross-examined Dr. Heegard on a statement from Dr. Gibson’s expert report where Dr. Gibson stated that a “message that informs a receiver that the transmitter has discarded packets, does not command the receiver to receive any packets.” 6/10/13 a.m. Tr. at 159:2–9. Dr. Heegard then conceded that discard messages are “generally speaking” not commands to receive. *Id.* at 160:16–19; *see id.* at 160:25–161:2 (“So generally is a discard message a command to receive, no. In this system, this message is a command to receive.”). Thus, Dr. Heegard admitted his view of the Petras discard messages conflicted with the generally understood operation of discard messages. Given that Dr. Heegard’s entire invalidity analysis was based on Petras discard messages being commands to receive, the jury was entitled to view this concession in Ericsson’s favor.

Both sides presented competing views of the Petras reference, and the jury accepted Ericsson’s view. *Cf. Goodman v. Harris Cnty.*, 571 F.3d 388, 398 (5th Cir. 2009) (quoting *United States v. Anderson*, 933 F.2d 1261, 1274 (5th Cir. 1991)) (“We accept all credibility choices that tend to support the jury’s verdict.”). There is sufficient evidence to support the jury’s finding of no invalidity of Claim 1 of the ‘625 Patent. Defendants’ motion for judgment as a matter of law is **DENIED**.

iii. The '435 Patent

Defendants also relied on the Petras Reference to show anticipation of Claims 1 and 2 of the '435 Patent. At trial, Ericsson presented testimony that Petras did not disclose removing entries from a list of expected packets. Ericsson now argues this evidence was sufficient to support the jury's verdict. *See* Docket No. 581 at 35. Ericsson contends Dr. Heegard made inconsistent statements about the list of expected packets. *Id.* at 35. Ericsson believes Dr. Heegard first testified a buffer was the list, then later testified a buffer was not the list. *Id.* Regardless, Ericsson argues Dr. Heegard's final list does not track packets but instead makes timestamp calculations. *Id.* at 36. Therefore, because the Petras Reference does not teach removing entries from a list of expected packets, it is not anticipatory. *Id.*

Defendants contend no reasonable jury could have found Claims 1 and 2 not invalid in light of the Petras Reference. Docket No. 528 at 33. Dr. Heegard testified that the Petras Reference discloses a list that tracks which packets are expected or missing from the receiver's buffer. *Id.* at 34. Defendants argue this evidence mandated a finding of invalidity by the jury. *Id.*

Analysis of the '435 Patent is very similar to the analysis of the '625 Patent. Once again, Dr. Heegard testified the Petras Reference contained a particular limitation, and Dr. Nettles testified it did not. Both sides presented competing expert opinions, and the jury sided with Ericsson. This is no reason to disrupt the jury's verdict.

Ericsson presented substantial evidence to support the verdict. Dr. Nettles testified Petras failed to disclose removing entries from a list of expected packets. 6/11/13 a.m. Tr. at 101:5–13. Dr. Nettles explained that the figure identified by Dr. Heegard was something “you would never want to remove expectations from.” *Id.* at 101:23–25. According to Dr. Nettles, the figure identified by Dr. Heegard is used to make calculations about timestamps. *Id.* at 102:2–6.

Consequently, if an entry was removed from the list, the timestamp calculation would be incorrect. *See id.*

Dr. Heegard presented a somewhat muddled view of how he believed the Petras Reference actually disclosed a list of expected entries. On direct examination, Dr. Heegard testified the receiver keeps track of which packets “have been received and are sitting in the buffer.” 6/10/13 p.m. Tr. at 137:13–17. Heegard explained that a receiver must “keep track of what things are received and they’re sitting in the buffer, and it’s got to keep track of what things it expects to receive.” *Id.* at 137:18–22. On cross examination, Dr. Heegard then stated “the buffer’s not the list.” *Id.* at 162:23. Instead, one of ordinary skill would know to keep a list.⁷ *Id.* at 163:3–15. Dr. Heegard further testified that the buffer was not the list, but “a list keeps track of a buffer.” *Id.* at 164:21–22. On re-direct, Dr. Heegard clarified that Petras shows “a buffer and with a list keeping track of it.” *Id.* at 166:22–23.

As is apparent from the quoted testimony, Dr. Heegard struggled to consistently articulate his reasoning for anticipation. Combined with the testimony of Dr. Nettles, there was more than enough evidence to support the jury’s verdict of no invalidity of the ‘435 Patent. Defendants’ motion for judgment as a matter of law is **DENIED**.

E. Motion for New Trial

As an alternative to judgment as a matter of law, Defendants request a new trial on all validity and infringement issues. As discussed above, there was substantial evidence to support the jury’s verdict of both infringement and no invalidity. Accordingly, Defendants’ motion for a new trial on infringement and validity is **DENIED**.

⁷ *See* 6/10/13 p.m. Tr. at at 164:14–17 (“The buffer has 1 and 3 in it. So I know, okay, 1 and 3 sitting in the buffer, 0 and 2 is missing. I keep track. 0 and 2 is missing. 1 and 3 is in the buffer. That’s the list.”) (Heegard).

III. Defendants' Renewed Motion for Judgment as a Matter of Law on Ericsson's Damages Claims or, in the Alternative, for Vacatur, Remittitur or a New Trial on Damages (Docket No. 529)

In this motion, Defendants challenge the jury's damage award. First, Defendants contend the damages violate the entire market value rule. Next, Defendants contend Ericsson's expert (Mr. Bone) relied on non-comparable licenses and failed to apportion between patented and non-patented features. Next, Defendants contend the damage award is inconsistent with Ericsson's RAND obligations and fails to account for royalty stacking. Finally, Defendants request a new trial on damages. Defendants contend the Court's jury instructions and verdict form contained prejudicial errors.

A. Applicable Law

A patentee is entitled to damages for infringement under 35 U.S.C. § 284. The burden of proving damages falls on the patentee. *Dow Chem. Co. v. Mee Indus., Inc.*, 341 F.3d 1370, 1381 (Fed. Cir. 2003). There are two alternative categories of infringement compensation—the patentee's lost profits, and the reasonable royalty the patentee would have received through arms-length bargaining. *Lucent Tech., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1324 (Fed. Cir. 2009).

To ascertain a reasonable royalty, patentees commonly consider a hypothetical negotiation in which the asserted patent claims are assumed valid, enforceable, and infringed, and attempt to ascertain the royalty upon which the parties would have agreed had they successfully negotiated an agreement just before infringement began. *Id.* at 1324–25; *see also Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1554 n.13 (Fed. Cir. 1995) (en banc). Calculation of a reasonable royalty requires determination of two separate and distinct amounts: 1) the royalty base, or the revenue pool implicated by the infringement; and 2) the royalty rate, or the

percentage of that pool “adequate to compensate” the plaintiff for the infringement. *Cornell Univ. v. Hewlett-Packard Co.*, 609 F. Supp. 2d 279, 286 (N.D.N.Y. 2009).

The entire market value rule “recognizes that the economic value of a patent may be greater than the value of the sales of the patented part alone.” *See King Instruments Corp. v. Perego*, 65 F.3d 941, 951 n.5 (Fed. Cir. 1995). “The entire market value rule allows a patentee to assess damages based on the entire market value of the accused product [if] the patented feature creates the ‘basis for customer demand’ or ‘substantially create[s] the value of the component parts.’” *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1318 (Fed. Cir. 2011) (citing *Lucent*, 580 F.3d at 1336). “[T]he patentee . . . 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, and such evidence must be reliable and tangible, and not conjectural or speculative,” or show that “the entire value of the whole machine, as a marketable article, is properly and legally attributable to the patented feature.” *Id.* (citing *Garreston v. Clark*, 111 U.S. 120, 121, 4 S.Ct. 291, 28 L.Ed. 371 (1884)); *see also Lucent*, 580 F.3d at 1336–67. For minor patent improvements, a patentee cannot justify using the entire market value of an accused product simply by asserting a lower royalty rate. *Uniloc*, 632 F.3d at 1319–20 (rejecting contrary interpretation of *Lucent*, 580 F.3d at 1338–39). Although a reasonable royalty analysis “necessarily involves an element of approximation and uncertainty,” *Unisplay, S.A. v. Am. Elec. Sign Co.*, 69 F.3d 512, 517 (Fed. Cir. 1995), the Court must ensure the jury verdict is supported by sufficient evidence.

“A district court’s duty to remit excessive damages is a procedural issue, not unique to patent law.” *Imonex Servs., Inc. v. W.H. Munzprufer Dietmar Trenner GMBH*, 408 F.3d 1374, 1380 (Fed. Cir. 2005). In the Fifth Circuit, a decision on remittitur and new trial is within the

sound discretion of the trial court. *See Volger v. Blackmore*, 352 F.3d 150, 154 (5th Cir. 2003). The standard is highly deferential, and damages are set aside “only upon a clear showing of excessiveness.” *i4i Ltd. v. Microsoft Corp.*, 598 F.3d 831, 857 (Fed. Cir. 2010) (quoting *Duff v. Werner Enters., Inc.*, 489 F.3d 727, 730 (5th Cir. 2007)). An excessive award exceeds the “maximum amount calculable from the evidence.” *Carlton v. H.C. Price Co.*, 640 F.2d 573, 579 (5th Cir. 1981).

B. Entire Market Value Rule and Apportionment

Defendants first contend they are entitled to judgment as a matter of law because the jury’s damages award violates the entire market value rule. Docket No. 529 at 2. Defendants contend Mr. Bone derived his \$0.50 per unit royalty from the value of end products (i.e. routers and computers) instead of limiting his royalty base to the smallest salable patent-practicing unit. *Id.* at 3. Defendants argue the WiFi chips are the smallest salable unit, and there was no evidence the chips drove demand for the end products. *Id.* at 4. Accordingly, Defendants assert that Mr. Bone improperly relied on end-product revenues to arrive at his royalty. *Id.*

Ericsson argues Mr. Bone’s analysis did not violate the entire market value rule because it did not implicate the entire market value rule. Docket No. 584 at 8. Ericsson contends Mr. Bone’s royalty base was not the market value of the end products; it was the market value of the asserted patents’ contributions to the end products. *Id.* at 9. Additionally, Ericsson contends both sides agreed on the proper royalty base—the stipulated number of accused products sold—and Defendants’ own expert used router and computer sales as his base. *Id.* at 9.

Defendants next contend they are entitled to judgment as a matter of law because Mr. Bone failed to apportion between patented and unpatented features. Docket No. 529 at 6. Defendants argue Mr. Bone did not properly apportion Ericsson’s portfolio rate to account for

the value of the patented features as opposed to non-patented features. *Id.* As an example, Defendants cite testimony from Dr. Perryman that only 17.5% of a WiFi chip relates to 802.11n, and that 17.5% covers significantly more than the accused Quality of Service and Block Acknowledgment features. *Id.* Ericsson counters that Mr. Bone's analysis contained two distinct levels of apportionment to arrive at an appropriate royalty. Docket No. 584 at 10. Further, Ericsson argues the Court rejected an identical argument in Defendants' pre-trial *Daubert* motion, so there is no reason to reach a different result post-trial. *Id.*

Defendants' entire market value rule and apportionment arguments are nearly identical to those raised (and rejected) pre-trial. *See* Docket No. 443. These same arguments are once again rejected post-trial. Defendants' apportionment argument ignores two different levels of apportionment in Mr. Bone's analysis. At the first level, Bone only considered revenue from the licensing of Ericsson's 802.11 portfolio. At the second level, Mr. Bone apportioned the 802.11 licensing revenue to extract the value attributed to non-asserted patents. Combined, these two levels limit the revenue pool to the market value of the asserted patents' contribution to the 802.11 standard.

The first level of apportionment reduced the revenue pool to the value of Ericsson's 802.11 contributions. On multiple occasions, Ericsson licensed its 802.11 portfolio to third parties. *See* 6/5/13 p.m. Tr. at 148:6–20 (Bone). Each license covered only a particular portion of the 802.11 standard—namely, the portion of the 802.11 standard the third party licensees believed was covered by Ericsson's portfolio.⁸ Defendants attempt to downplay the significance of these licenses, but they reflect a real-world valuation of Ericsson's 802.11 patents. *See* 6/5/13 p.m. Tr. at 146:15–17, 150:24–152:18 (Bone); *Monsanto Co. v. McFarling*, 488 F.3d 973, 978–

⁸ 6/6/13 a.m. Sealed Tr. at at 3:10–7:3 (HP); 7:5–9:17 (Buffalo); 9:18–11:23 (RIM); 11:24–13:18 (Option); 13:19–14:22 (Ascom); 14:23–16:5 (Sonim).

79 (Fed. Cir. 2007) (“An established royalty is usually the best measure of a “reasonable” royalty for a given use of an invention because it removes the need to guess at the terms to which parties would hypothetically agree.”). The licensees would not have paid value for a license unless they believed Ericsson’s patents covered at least a portion of the standard. Similarly, the licensees would not have paid value for the portion of the standard not covered by Ericsson’s patents. Consequently, the money paid under these licenses represents the market’s valuation of the 802.11 contributions of Ericsson’s patents. *See LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 67 (Fed. Cir. 2012) (quoting *ResQNet.com, Inc. v. Lansa, Inc.*, 594 F.3d 860, 869 (Fed. Cir. 2010)) (“The trial court must carefully tie proof of damages to the claimed invention’s footprint in the market place.”).

The five patents asserted in this case are not the entirety of Ericsson’s 802.11 portfolio—they are only a subset of it. However, Mr. Bone’s second level of apportionment factors this into account. Mr. Bone reduced his rates “to account for the fact we’re only dealing with five patents in this case.” 6/6/13 a.m. Sealed Tr. at 18:24–19:1. He further testified that the five asserted patents comprise at least fifty percent of the value of Ericsson’s 802.11 portfolio. *Id.* at 20:3–14. This was a realistic and thorough attempt to apportion revenue to only the asserted patents. *Compare VirnetX Inc. v. Cisco Sys., Inc.*, 2013 WL 789288, at *2 (E.D. Tex. Mar. 1, 2013) (Davis, J.). The end result of Mr. Bone’s analysis is a royalty pool comprising money paid by third party licensees for the value of the asserted patents’ contributions to the 802.11 standard. *See* 6/6/13 a.m. Sealed Tr. at 58:20–59:1 (“Q: Okay. Is there some indications to you in this case that Ericsson’s portfolio is worth 50 cents? A: Yes. Q: And what is that? A: The actual agreements that companies were willing to pay for Ericsson’s technology, the six agreements

we've talked about.”); *LaserDynamics*, 694 F.3d at 68 (requiring courts to examine only revenues associated with the patented components).

Defendants also argue Mr. Bone's analysis violates the entire market value rule by using the value of end products without proving the patented feature is the basis for customer demand of the accused product. This argument fails for many of the same reasons as Defendants' apportionment argument. Mr. Bone's revenue base is not the market value of the end products. Rather, it is the market value of the contribution of the asserted patents to the end products. This distinction is critical to the analysis. The licensing revenue from Ericsson's portfolio is attributable only to the value Ericsson's patents add to the licensees' end products; it is not attributable to the end products as a whole. It goes without saying that the licensees would not have paid value for portions of the 802.11 standard unrelated to Ericsson's patents. Therefore, Mr. Bone's report does not implicate the entire market value rule. *See Versata Software, Inc. v. SAP Am., Inc.*, --- F.3d ----, 2013 WL 1810957, at *12 (Fed. Cir. May 1, 2013) (finding that a plaintiff's damage model did not implicate the entire market value rule because it “merely accounted for all infringing sales”); *Fractus, S.A. v. Samsung Elecs. Co.*, 876 F. Supp. 2d 802, 833 (E.D. Tex. 2012) (Davis, J.).

Additionally, Mr. Bone's analysis calls for a per unit royalty on all sales of accused products. As a per unit royalty, it does not fluctuate with the price of the end product. Regardless of the ultimate sale price of the end product, the royalty rate remains constant. 6/5/13 p.m. Tr. at 147:16–17 (“So the value is on a per-unit basis regardless of whether it's in a router or a laptop.”) (Bone). This further illustrates that Mr. Bone did not rely on the value of end products in his analysis.⁹ *See SynQor, Inc. v. Artesyn Techs., Inc.*, 709 F.3d 1365, 1383 (Fed. Cir. 2013)

⁹ Mr. Bone acknowledges that it would not have been appropriate to calculate damages as a percentage of the sales of end products like routers and computers. *See* 6/5/13 p.m. Tr. at at 147:8–17.

(determining that a plaintiff did not invoke the entire market value rule when it “never sought to justify its damages figure based on the price of the customer end products”).

Defendants’ motion for judgment as a matter of law regarding the entire market value rule and lack of apportionment is **DENIED**.

C. Ericsson’s RAND Obligations

Next, Defendants contend they are entitled to judgment as a matter of law because the jury’s damages award is inconsistent with Ericsson’s RAND obligations. Docket No. 529 at 8. Defendants argue Ericsson is under a RAND obligation to provide licenses to an “unrestricted” number of licensees, but Ericsson refused to offer a license to Intel. *Id.* At Ericsson’s request, the verdict form did not include a space to award damages against Intel. *Id.* Defendants contend this is equivalent to a refusal to offer a license to Intel, which runs contrary to Ericsson’s RAND obligations. *Id.*

Ericsson contends Defendants waived this argument because Defendants never objected to the verdict form on the grounds that it did not contain a space to assess damages against Intel. Docket No. 584 at 11. Additionally, Ericsson contends this issue is moot because it has now offered a license to Intel. *Id.*

Defendants basically argue Ericsson breached its RAND obligations by not suing Intel, then not seeking damages against Intel after it intervened in the case. This argument fails for two reasons. First, Ericsson is the plaintiff. As the plaintiff, it is the master of its own case. Originally, Ericsson elected not to sue Intel, and Defendants cite no law requiring a patentee to *sue* all potential licensees.¹⁰ After Intel intervened in the case, Ericsson elected not to pursue

¹⁰ Defendants argue Ericsson must *license* an unrestricted number of users on fair and reasonable terms. *See* Docket No. 529 at 7.

damages from Intel. *See* 6/5/13 p.m. Tr. at 145:12–146:7 (Bone). Once again, Defendants cite no authority that a plaintiff must seek damages from all Defendants in a case.

Second, this issue is moot because Ericsson offered Intel a license prior to trial. *See* 6/4/13 p.m. Tr. at 51:2–15 (Petersson). The license offer was on the same terms as Ericsson’s offers to other Defendants, and it was at the same rate Ericsson sought against the other Defendants at trial. *See id.* Intel may argue the license offer was superficial, but Intel itself never meaningfully engaged in licensing talks with Ericsson after Ericsson’s initial offer. *See id.* at 57:4–15. Intel cannot rely on its failure to negotiate to prove Ericsson’s failure to make a legitimate license offer.

Defendants’ motion for judgment as a matter of law that Ericsson breached its RAND obligation by not seeking damages against Intel is **DENIED**.¹¹

D. Non-Comparable Licenses

Next, Defendants contend they are entitled to judgment as a matter of law because Ericsson presented evidence of non-comparable licenses. Docket No. 529 at 8. Initially, Defendants argue Mr. Bone’s \$0.50 royalty rate is not found in any of the prior licenses. *Id.* Instead, it is an artificial value manufactured by Mr. Bone for the purposes of this litigation. *Id.* Defendants also argue the licenses are non-comparable because they cover different scopes. *Id.* None of the licenses were limited to the asserted patents, and several licenses had a worldwide scope. *Id.* at 10. Defendants next contend the licenses are non-comparable because they include value derived from Ericsson’s “overall patent leverage in the cellular space.” *Id.* at 12. Finally, Defendants assert that none of the licenses were comparable because none were negotiated with Ericsson’s RAND obligations in mind. *Id.* at 9.

¹¹ There is further analysis of Ericsson’s licensing policy towards Intel below in the Court’s findings of fact and conclusions of law. *See infra.*

Ericsson argues it only presented comparable licenses at trial, and the jury was in the best position to determine the degree of comparability of the licenses. Docket No. 584 at 11. Additionally, it argues Defendants' arguments about the value of the previous licenses are misplaced. *Id.* at 12–13. Ericsson contends third party licensees like Buffalo, HP, and RIM are in the best position to determine the value of Ericsson's 802.11n portfolio, so their licenses are highly relevant. *Id.* at 13.

Defendants' arguments regarding the comparability of Mr. Bone's licenses were more appropriate for cross examination than for judgment as a matter of law. *See ActiveVideo Networks, Inc. v. Verizon Commc'ns, Inc.*, 694 F.3d 1312, 1333 (Fed. Cir. 2012) ("The degree of comparability of the...license agreements as well as any failure on the part of [the plaintiff's] expert to control for certain variables are factual issues best addressed by cross examination and not by exclusion."). All of the licenses Mr. Bone cited contain the patents in suit, and he gave detailed testimony addressing his apportionment of those licenses.¹² *See* 6/5/13 p.m. Tr. at 149:5–14 (Bone); 6/6/13 a.m. Sealed Tr. at 3:10–27:7 (Bone); 6/4/13 a.m. Sealed Tr. at 3:11–12:16, 14:4–28:7 (Pettersson); *LaserDynamics*, 694 F.3d at 79–80 ("Actual licenses to the patented technology are highly probative as to what constitutes a reasonable royalty for those patent rights because such actual licenses most clearly reflect the economic value of the patented technology in the marketplace."); *compare ResQNet*, 594 F.3d at 870 (vacating a damages award because the plaintiff relied on licenses with no relationship to the claimed invention). Defendants had the opportunity to cross-examine Mr. Bone about his apportionment, and they presented their own damages expert to rebut Mr. Bone's analysis. *See* 6/6/13 a.m. Sealed Tr. at 27:24–50:25 (Bone cross examination); 6/11/13 a.m. Sealed Tr. at 3:18–25 (Perryman). The

¹² Defendants contend Mr. Bone's analysis was flawed because he failed to rely on the Infineon license. *See* Docket No. 529 at 9–10. However, the Infineon license did not even contain the patents in suit.

determination of which expert's apportionment was more credible was an issue for the jury, and there is no reason to re-open the jury's factual determination.

Defendants also argue the licenses are incomparable because "there is no evidence that the licenses were negotiated with Ericsson's RAND obligations in mind." *See* Docket No. 529 at 9. However, they cite no binding authority that a prior license is incomparable as a matter of law if it was not negotiated within the RAND framework. *See id.* at 8–13; Docket No. 593 at 4. Even if there were binding authority on the issue, Mr. Bone testified that the prior licenses were all negotiated within the framework of Ericsson's RAND obligations. 6/6/13 a.m. Tr. at 13:4–8. Ericsson also presented evidence that it considered its RAND obligations when establishing a \$0.50 per unit royalty. 6/4/13 a.m. Sealed Tr. at 15:22–16:17 (Petersson); 6/4/13 p.m. Tr. at 14:11–25, 53:13–54:6 (Petersson).

Additionally, Ericsson's RAND obligations are public knowledge. Ericsson's letters of assurance to the IEEE are publically available, so any potential licensee would be able to determine whether Ericsson had RAND obligations. The previous licensees were sophisticated parties, making it likely they would have been aware of Ericsson's RAND obligations during the negotiations. Taken together, there was substantial evidence that the prior licenses were negotiated within the framework of Ericsson's RAND obligations.

Defendants' motion for judgment as a matter of law regarding the comparability of prior licenses is **DENIED**.

E. Royalty Stacking

Defendants next contend they are entitled to judgment as a matter of law because the verdict failed to account for royalty stacking. Docket No. 529 at 13. Defendants believe "a legally proper damages model would necessarily account for the danger that royalty stacking

would block or impede the 802.11 standard.” *Id.* at 14. Defendants argue one of Ericsson’s RAND obligations is to account for the impact of royalty stacking, but said accounting is missing from Mr. Bone’s analysis. *Id.* Defendants contend the “undisputed evidence” established that a proper RAND rate should be limited to “pennies or fractions thereof” per unit. *Id.*

Ericsson counters that Defendants’ royalty stacking arguments are purely hypothetical. Docket No. 584 at 14. Ericsson argues Mr. Bone considered the possibility of royalty stacking, but he could not find any evidence that a rate of \$0.50 per unit would create royalty stacking problems. *Id.* Additionally, Ericsson asserts that Defendants failed to present any evidence of actual royalty stacking on 802.11n-compliant products. *Id.* at 15.

The best word to describe Defendants’ royalty stacking argument is theoretical. At trial, Defendants extensively cross-examined Mr. Bone regarding the impact of royalty stacking on standard-essential patents.¹³ *See* 6/6/13 a.m. Tr. at 22:15–29:21 (Bone). At one point, Defendants’ counsel even suggested a theoretical stack could be \$23.30 on a \$2.50 standard-essential chip. *See id.* at 29:12–21. However, given the opportunity to present evidence of an *actual* stack on 802.11n essential products, Defendants came up empty. Dr. Perryman did not testify the actual royalty stack was \$23.30. Nor did he testify the actual stack was \$16, as Defendants’ counsel also hypothesized. *See id.* at 29:3–10. Instead, Dr. Perryman never identified an actual royalty stack; he never even attempted to determine the actual amount of royalties Defendants currently pay for 802.11 patents. *See* 6/11/13 a.m. Tr. at 64:19–65:3 (“Q: Did you try to figure out the cost per unit that these Defendants are paying for standard essential 802.11 patents? A: No, sir, I did not.”). Further muddling Defendants’ royalty stacking

¹³ Mr. Bone testified that third party licensees considered royalty stacking during negotiations with Ericsson. *See* 6/6/13 a.m. Sealed Tr. at 17:3–20.

argument, their infringement expert conceded that “very little of the standard is patented.” *See* 6/10/13 p.m. Tr. at 5:16–23 (Gibson).

Defendants’ motion for judgment as a matter of law regarding royalty stacking is **DENIED**.

F. Method Claims

Next, Defendants contend they are entitled to judgment as a matter of law because the jury failed to properly account for the method claims found infringed. Docket No. 529 at 14. Defendants assert that damages should be limited to the demonstrated number of accused products that have been used in an infringing manner. *Id.* Defendants argue Ericsson did not provide any evidence regarding how often Defendants or their customers actually performed the claimed methods. *Id.* at 15. Thus, Ericsson’s damages theories with respect to method claims are insufficient as a matter of law. *Id.*

Ericsson argues it presented substantial evidence to support the jury’s damages award regarding the methods claims. Docket No. 584 at 15. Ericsson contends Dr. Nettles testified that Ericsson’s method claims are infringed during normal operation of the devices. *Id.* Thus, it presented evidence that Defendants infringed by making and selling the accused products. *See id.* (citing *SiRF Tech.*, 601 F.3d at 1331).

As discussed above in the infringement section, Ericsson presented substantial evidence to support the jury’s infringement verdict for the method claims. There was substantial evidence to support both direct and induced infringement by Defendants. Accordingly, Defendants’ motion for judgment as a matter of law regarding method claim damages is **DENIED**.

G. Defendants’ Motion for Vacatur, Remittitur, or a New Trial

In the alternative, Defendants ask the Court to either vacate or remit the jury's damages award or grant a new trial on damages. *See* Docket No. 529 at 16–21. Remittitur is within the sound discretion of the trial court and is only appropriate when the damages verdict is “clearly excessive.” *See Alameda Films S.A. v. Authors Rights Restoration Corp.*, 331 F.3d 472, 482 (5th Cir. 2003). Most of Defendants’ arguments in this section are identical to their JMOL arguments presented above.¹⁴ For the reasons set forth above, there was substantial evidence to support the jury’s verdict.

Defendants also present two additional arguments that they are entitled to a new damages trial. First, the verdict form did not include an entry for a paid-up lump sum license. Docket No. 529 at 22. The verdict form instructed the jury to determine the amount of damages that “would fairly and reasonably compensate Ericsson for infringement of the patents by the following Defendants up to the time of trial.” *Id.* at 23. Defendants contend this was a prejudicial error requiring a new trial, going so far as to say their “Constitutional rights to have the jury decide the appropriate form of the reasonable royalty” had been violated. *See* Docket No. 593 at 8. Defendants assert that they presented evidence at trial a lump-sum license was the appropriate form of damages. *Id.* Second, Defendants argue the Court committing prejudicial error by instructing the jury “an infringer’s net profit margin is not the ceiling by which a reasonable royalty is capped.” Docket No. 529 at 23. Defendants contend there was no evidence about their profit margins, so this instruction was improper. *Id.* at 24.

Regarding the lump sum license issue, Ericsson argues no new trial is needed. Docket No. 584 at 16. Ericsson contends Defendants’ argument is illogical because both sides stipulated to the number of infringing sales. *Id.* Because both sides agreed at trial to the proper damages

¹⁴ For example, Defendants contend a new trial is appropriate because: (1) the verdict was against the great weight of the evidence; (2) prejudicial error occurred by allowing Mr. Bone to testify; and (3) prejudicial error occurred because the Court admitted several non-comparable licenses.

base, Defendants should not be permitted to challenge that stipulation after the fact. *Id.* Ericsson also argues Defendants failed to cite any authority indicating they are entitled to a jury determination of future royalties. *Id.* at 17. With regard to the jury instruction regarding Defendants' profit margins, Ericsson makes two arguments. First, it argues the instruction was an accurate statement of the law. *Id.* Second, Ericsson contends the instruction was necessary. *Id.* at 18. Ericsson contends Defendants' statements to the jury about the cost of the 802.11n chip necessitated the instruction. *Id.*

A new trial is not warranted based on the verdict form. The verdict form stated:

What sum of money, if paid now in cash, do you find from a preponderance of the evidence would fairly and reasonably compensate Ericsson for infringement of the patents by the following Defendants up to the time of trial?

Docket No. 508 at 5. Defendants contend this instruction constitutes prejudicial error because it prevented the jury from awarding a lump sum royalty. Docket No. 529 at 23. However, the jury was specifically instructed that a lump sum royalty was appropriate. *See* Docket No. 504 at 28. Further, Defendants cite no authority for the proposition that there is a constitutional right to have a jury award future damages. *See Brooktree Corp. v. Advanced Micro Devices, Inc.*, 977 F.2d 1555, 1581 (Fed. Cir. 1992) (affirming a district court's refusal to present the issue of future damages to the jury); *Telecordia Techs., Inc. v. Cisco Sys., Inc.*, 612 F.3d 1365, 1377–78 (Fed. Cir. 2010); *Paice LLC v. Toyota Motor Corp.*, 504 F.3d 1293, 1316 (Fed. Cir. 2007).

Nor is a new trial warranted based on the Court's instruction about profit margins. The Court gave the following instruction to the jury:

An infringer's net profit margin is not the ceiling by which a reasonable royalty is capped. The infringer's selling price can be raised, if necessary, to accommodate a higher royalty rate. Requiring the infringer to do so, may be the only way to adequately compensate the patentee for the use of its technology.

6/12/13 a.m. Tr. at 43:18–24. This is an accurate statement of the law, taken almost verbatim from a recent Federal Circuit opinion. *See Douglas Dynamics, LLC v. Buyers Prods. Co.*, --- F.3d ----, 2013 WL 2158423, at *7 (Fed. Cir. May 21, 2013); *Rite-Hite*, 56 F.3d at 1555. Defendants do not contest the legal correctness of the statement. Rather, they argue there was no basis for giving the instruction because Ericsson did not present any evidence of Defendants' profit margins. *See* Docket No. 529 at 24; 6/11/13 p.m. Tr. at 81:10–23. However, Defendants repeatedly referenced the impropriety of a \$0.50 royalty on a \$2.50 chip. *See* 6/11/13 a.m. Tr. at 27:4–28:11, 46:5–15 (Perryman); 6/6/13 a.m. Tr. at 20:11–18 (Bone cross examination). These arguments are thinly-veiled references to Intel's profit margin. In light of these statements, it was not improper or prejudicial to give the instruction.

Defendants' motion for vacatur, remittitur, or a new trial on damages is **DENIED**.

IV. Ericsson's Post-Trial Motion for a Compulsory Future Royalty and Pre-Judgment and Post-Judgment Interest (Docket No. 527)

In this motion, Ericsson requests an ongoing future royalty of \$0.15 per unit. Ericsson also requests pre-judgment and post-judgment interest at the Texas statutory rate, compounded quarterly.

A. Applicable Law

A court should award interest in patent cases after a finding of infringement. 35 U.S.C. § 284. The purpose of prejudgment interest is to place the patentee in as good a position as it would have been had the infringer paid a reasonable royalty instead of infringing. *Beatrice Foods v. New England Printing*, 923 F.2d 1576, 1580 (Fed. Cir. 1991). Prejudgment interest should be awarded unless there is a significant justification for withholding such an award, such as a delay in bringing suit against the infringer. *See Gen. Motors Corp. v. Devex Corp.*, 461 U.S. 648, 657 (1983); *Bio-Rad Labs. v. Nicolet Instrument Corp.*, 807 F.2d 964, 967 (Fed. Cir. 1986).

The interest rate used to calculate prejudgment interest and the method and frequency of compounding are left to the discretion of the district court. *See Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 939 F.2d 1540, 1545 (Fed. Cir. 1991); *Studiengesellschaft Kohle, m.b.H. v. Dart Indus., Inc.*, 862 F.2d 1564, 1579–80 (Fed. Cir. 1988) (citing *Bio-Rad Labs.*, 807 F.2d at 969). Interest should be awarded from the date of infringement to the date of judgment. *Nickson Indus., Inc. v. Rol Mfg. Co.*, 847 F.2d 795, 800 (Fed. Cir. 1988).

B. Future Royalty

Ericsson contends it is entitled to an ongoing future royalty of \$0.15 per unit. Docket No. 527. At the post-trial hearing, Defendants stated they did not oppose a \$0.15 per unit future royalty if the Court denied their JMOL motions. Accordingly, the Court **GRANTS** Ericsson's motion for an ongoing royalty of \$0.15 per unit.

C. Pre-Judgment and Post-Judgment Interest

At the post-trial hearing, Defendants stated they would not oppose awarding interest to Ericsson. However, the parties debate which interest rate should be used.

Ericsson argues it should be awarded pre-judgment and post-judgment interest at the Texas statutory rate, compounded quarterly. Docket No. 527 at 5. Ericsson acknowledges that this Court generally awards interest at the prime rate, compounded quarterly. *Id.* However, Ericsson contends the prime rate is artificially low because of the Federal Reserve's recent efforts to combat the recession. *Id.* Therefore, Ericsson believes the Texas statutory rate more accurately reflects current market conditions. *Id.* at 6. Defendants believe the appropriate interest rate is the prime rate, compounded quarterly. Docket No. 579 at 5.

This Court's standard practice is to award interest at the prime rate, compounded quarterly. *See VirnetX Inc. v. Apple Inc.*, ---F. Supp. 2d---, 2013 WL 692652, at *19 (E.D. Tex.

Feb. 26, 2013) (Davis, J.) (collecting cases). In keeping with its standard practice, the Court **GRANTS** Ericsson's motion for pre-judgment¹⁵ and post-judgment¹⁶ interest at the prime rate, compounded quarterly.

V. Ericsson's Motion to Supplement the Record (Docket No. 589)

As stated at the hearing, Ericsson's motion to supplement the record is **GRANTED**. Defendants may respond by supplementing the record with brief portions of Mr. Bone's report.

VI. Defendant's Motion for Judgment on Post-Trial Proposed Findings of Fact and Conclusions of Law (Docket No. 588)

On June 12, 2013, the Court conducted a bench trial on the issue of Ericsson's RAND obligations. *See* 6/12/13 p.m. Tr. at 6:15–194:4. Defendants now ask the Court to make three findings. *See* Docket No. 588 at 2. First, Defendants ask the Court to determine the RAND rate for Ericsson's 802.11n essential patents. Second, Defendants seek a determination that Ericsson breached its RAND obligations by refusing to license chip suppliers (i.e. Intel) on RAND terms and by demanding a royalty rate that exceeds RAND amounts. Third, Defendants request a determination that Ericsson is not entitled to injunctive relief. The Court will address each issue individually.

A. Determination of a RAND Royalty

There is no need for the Court to determine an appropriate RAND royalty for the infringed patents because the jury already determined a reasonable royalty for those same patents, and the jury considered Ericsson's RAND obligations when rendering its verdict. In their post-trial briefing, Defendants asked the Court to determine an appropriate RAND rate for the patents in suit. *See* Docket No. 588 at 2. However, Defendants wavered on whether they

¹⁵ Each Defendant is responsible for the following pre-judgment interest: \$98,275 for Acer/Gateway; \$127,626 for Dell; \$22,508 for D-Link; \$224,141 for Netgear; and \$152,798 for Toshiba.

¹⁶ Each Defendant is responsible for the following post-judgment interest, per day, from the date this judgment issues: \$113 for Acer/Gateway; \$182 for Dell; \$41 for D-Link; \$336 for Netgear; and \$231 for Toshiba.

would agree to actually *pay* the RAND rate determined by the Court. In essence, Defendants asked the Court to determine Ericsson's initial RAND offer, but they refused to make any assurances they would accept such an offer. This would have amounted to nothing more than an advisory opinion as to Ericsson's initial RAND license offer. *See Artic Corner, Inc. v. United States*, 845 F.2d 999, 1000 (Fed. Cir. 1988) ("At the heart of the 'case or controversy' requirement is the prohibition against advisory opinions."); *Teva Pharm. USA, Inc. v. Novartis Pharm. Corp.*, 482 F.3d 1330, 1337–38 (Fed. Cir. 2007).

Defendants cannot ask the Court to determine a RAND rate but refuse to be bound by it. At the post-trial hearing, the Court ordered the Defendants to notify it whether they would accept a RAND rate entered by this Court. Defendants responded that they would "accept a Court-determined RAND rate limited to the Subject Products and Subject Patents." *See* Docket No. 612 at 1. A RAND rate limited to the Subject Products and Subject Patents is another way of saying Defendants would accept the jury's verdict. The jury's verdict was limited to the asserted patents, and it was limited to the accused products. Thus, Defendants will only agree to pay a RAND rate for the territory already covered by the trial. Because there was substantial evidence to support the jury's verdict, there is no need for this Court to make its own factual determination of an appropriate royalty rate.

Defendants attempt to distinguish the jury verdict from the RAND case on three grounds: (1) Defendants presented additional evidence to the Court that was not presented to the jury; (2) Ericsson did not present a damages claim against Intel to the jury; and (3) the jury trial "was restricted in scope to the five U.S. patents-in-suit. It thus did not consider the appropriate RAND rate for Ericsson's worldwide portfolio of alleged 802.11 patents." Docket No. 599 at 11. The Court will address each argument in turn.

First, Defendants contend the jury verdict does not dictate the RAND rate because Defendants presented additional evidence during the bench trial. This argument fails because Defendants presented substantial RAND evidence to the jury. 6/11/13 a.m. Tr. at 9:15–10:17 (Forslund); 6/11/13 a.m. Tr. at 75:9–77:11 (Perryman); 6/6/13 a.m. Tr. at 21:16–20 (Bone cross examination). By presenting additional evidence during the bench trial, Defendants attempted to hedge their RAND position post-trial. Essentially, Defendants sought to use RAND as their jury defense while keeping an equitable RAND defense in their back pocket. Thus, Defendants wanted to use RAND as their primary defense *and* their fallback position. There was no justification for doing so—all of the RAND evidence presented during the bench trial would have been equally appropriate during the jury trial.

Defendants presented significant RAND evidence during the jury portion of the trial. In fact, a significant portion of Defendants’ damages argument was based on Ericsson’s RAND obligations. Defendants requested multiple RAND instructions, two of which were given to the jury. In particular, the Court gave the following instruction:

Moreover, because Ericsson has agreed that it is under an obligation to license the patents-in-suit on Reasonable and Non-Discriminatory (“RAND”) terms, you must ensure that any damages award is consistent with and does not exceed the amounts permitted under Ericsson’s RAND obligations.

Docket No. 504 at 23. The Court also modified the traditional *Georgia-Pacific* factors in its instructions to include Ericsson’s obligation to license its patents on RAND terms. *See id.* at 28. Defendants cannot now argue the jury’s verdict failed to consider Ericsson’s RAND obligations when they based their jury defense on RAND.

Second, Defendants contend the jury’s verdict does not reflect the RAND rate because Ericsson did not present a damage calculation against Intel. Defendants cross-examined Mr. Bone on this exact issue. Defendants asked Mr. Bone if his royalty rate would apply to chips, and

he responded that it would. *See* 6/6/13 a.m. Tr. at 20:11–18. Thus, Defendants’ argument regarding Intel damages is incorrect.

Third, Defendants argue the jury did not consider the appropriate RAND rate for Ericsson’s worldwide 802.11 portfolio. This argument rings hollow in light of Defendants’ refusal to agree to pay a Court-determined worldwide RAND rate. Defendants contend the jury verdict is not a proper RAND rate because it is not a worldwide license, but Defendants refuse to agree to pay a worldwide RAND license. *See* Docket Nos. 612, 614. Defendants cannot have it both ways. Since Defendants refuse to agree to pay a Court-determined worldwide RAND license, they cannot use the lack of worldwide RAND evidence to distinguish the jury verdict.

For the foregoing reasons, the Court need not determine an appropriate RAND rate because the jury already made this determination. The appropriate United States RAND rate is \$0.15 per product for the three infringed patents.

B. Ericsson’s RAND Obligation to License Intel

i. Findings of Fact

Ericsson is a member of the IEEE. 6/3/13 p.m. Tr. at 137:8–9 (Brismark). As an IEEE member, Ericsson has an obligation to license its standard-essential patents on reasonable and non-discriminatory terms. *Id.* at 128:4–8. A RAND license offer must be “at a price which is reasonable in light of the contribution [the] technology gives to the end user who is using that standard.” *Id.* at 128:16–19. A RAND offer must also be non-discriminatory, meaning a licensor may not discriminate against any particular licensee. *Id.* at 129:13–20.

An IEEE participant declares its patents standard-essential through letters of assurance. *Id.* at 141:1–10. A letter of assurance is a commitment from a patent holder to potential licensees that it will offer licenses on RAND terms. *Id.* Participation in standard setting is voluntary, and a

company is not required to participate in the standard-setting process to hold standard-essential patents. *See* 6/12/13 p.m. Tr. at 29:14–31:24 (Shoemake). Further, because participation is voluntary, an IEEE member may restrict or limit its participation in the process. *See id.* at 32:20–24.

Ericsson committed to offer RAND licenses to “fully compliant” products, and it gave notice of this position in its letters of assurance to the IEEE. *See* 6/4/13 p.m. Tr. at 40:23–41:4, 52:3–21 (Pettersson). Ericsson’s objective in licensing only fully compliant products was to isolate a particular level of the supply chain and to license companies at that level. 6/12/13 p.m. Tr. at 148:8–149:11 (Brismark). By licensing end product manufacturers, Ericsson believed it was indirectly licensing chip manufacturers such as Intel. *See id.* Ericsson believed it complied with its RAND obligations because it did not discriminate against competitors. 6/3/13 p.m. Tr. at 129:21–130:4 (Brismark); *see* 6/12/13 p.m. Tr. at 34:7–14 (Shoemake). There is no IEEE rule preventing restricted RAND commitments, and other companies have adopted the same “fully compliant” licensing policy as Ericsson. *See* 6/12/13 p.m. Tr. at 137:5–8 (Perryman).

Ericsson offered Intel a license to the asserted patents in March 2013 at the rate of \$0.50 per unit. 6/12/13 p.m. Tr. at 149:20–150:5, 166:1–8 (Brismark). Ericsson made this offer in an attempt to settle the pending litigation. *Id.* at 149:20–150:5; 6/4/14 p.m. Tr. at 51:13–15 (Pettersson). After Ericsson made its initial offer to Intel, Intel requested a proposed draft license agreement. 6/12/13 p.m. Tr. at 166:16–22 (Brismark). Ericsson submitted a proposed agreement to Intel on April 25, 2013, but Intel never responded to the proposed agreement. *Id.* at 166:21–167:12. When Ericsson submitted the draft agreement to Intel, Ericsson was prepared to negotiate the final terms of the license. *Id.* at 167:3–6.

ii. Conclusions of Law

Ericsson did not violate its RAND obligations by refusing to license Intel because it offered a license to Intel in March 2013. Ericsson offered a license to Intel at the same rate and terms as the remaining Defendants. Intel contends Ericsson's offer was illusory, but it presented no evidence to support this assertion. *Compare id.* at 167:3–12 (testifying that Ericsson was prepared to negotiate the terms of a potential license). After the trial, Ericsson amended its license offer to Intel to reflect the jury verdict. *See* PX628. Both of these offers were legitimate RAND offers to which Intel never countered. Ericsson therefore satisfied any RAND obligation to offer a license to Intel.

Defendants have no breach of contract remedy against Ericsson for its policy of licensing only “fully compliant” products.¹⁷ Participation in standard-setting organizations such as the IEEE is voluntary, and parties are free to restrict or limit their level of participation. There is nothing inherently wrong or unfair with Ericsson's practice of licensing “fully compliant” products, and they gave notice of this position in their initial letter of assurance. Further, other large companies have adopted similar policies of only licensing fully compliant products. Defendants cite no IEEE rule or guideline requiring full participation in order to have standard-essential patents. Thus, Defendants have no right to equitable relief for Ericsson's practice of licensing only fully compliant products.

Ericsson did not violate its RAND obligations by refusing to license Intel.

¹⁷ At the outset, this issue is moot because Ericsson offered a license to Intel, and there are no remaining Defendants asserting that Ericsson refused to offer them a license because their products were not fully compliant. *Cf.* 6/12/13 p.m. Tr. at 149:15–16 (Brismark) (“Ericsson has never attempted to block any chipset player.”).

C. Ericsson's \$0.50 RAND Rate

i. Findings of Fact

Ericsson is a sophisticated licensing entity, with over 100 outstanding patent licenses. *See* 6/3/13 p.m. Tr. at 109:22–110:14 (Brismark); 6/4/13 a.m. Tr. at 132:23–25 (Petersson). It has an incentive to establish a reasonable licensing rate to maintain credibility in the licensing community. *See* 6/12/13 p.m. Tr. at 180:23–182:9 (Bone). For its 802.11 portfolio, Ericsson believes an appropriate royalty rate is \$0.50 per unit. 6/3/13 p.m. Tr. at 133:4–11 (Brismark). Ericsson calculated this rate based on collaboration between technical and licensing experts, and it sought feedback from third party licensees about the reasonableness of its rate. *See* 6/4/13 a.m. Tr. at 127:24–129:22 (Petersson). Ericsson supported its rate with expert testimony from Mr. Bone. Mr. Bone relied on six previous licenses involving the asserted patents to determine an appropriate royalty rate. *See* 6/5/13 p.m. Tr. at 149:5–14 (Bone); 6/6/13 a.m. Sealed Tr. at 3:10–27:7 (Bone); 6/4/13 a.m. Sealed Tr. at 3:11–12:16, 14:4–28:7 (Petersson).

Ericsson considered its RAND obligations when determining its rate. 6/4/13 p.m. Tr. at 14:11–25 (Petersson). Ericsson has a team of employees tasked with monitoring Ericsson's compliance with its RAND obligations. *See* 6/12/13 p.m. Tr. at 142:8–24 (Brismark). These individuals attempt to determine the number of standard-essential patents, and they attempt to determine Ericsson's share of 802.11n patents. *Id.* at 142:25–143:15; *see* 6/4/13 p.m. Tr. at 21:4–12 (Petersson) (“We are, of course, taking into consideration that there are other patent holders in the standard when we set our rate.”). This is an ongoing process shaped by feedback from potential licensees. 6/12/13 p.m. Tr. at 143:16–24 (Brismark); 6/4/13 p.m. Tr. at 53:13–54:6 (Petersson).

There is no way to determine the exact number of standard-essential patents. *Cf.* 6/12/13 p.m. Tr. at 29:7–9 (Shoemake); *id.* at 134:9–15 (Perryman). The IEEE makes no determination whether the patents identified in a letter of assurance are essential to the standard, so companies may wrongly declare “non-essential” patents essential. *See* 6/6/13 a.m. Tr. at 23:11–25:4 (Bone) (discussing letters of assurance). Neither side attempted to determine the exact number of standard-essential patents. Dr. Shoemake testified about the number of patents related to the 802.11n standard, but he did not try to determine how many patents are standard-essential. *See* 6/12/13 p.m. Tr. at 29:4–9. Mr. Bone based his analysis on previous licenses—he made no attempt to determine the number of essential patents. Additionally, Dr. Gibson testified that very little of the 802.11n standard is actually patented. *See* 6/10/13 p.m. Tr. at 5:16–23.

Defendants did not present any evidence of an actual royalty stack on the asserted patents. Dr. Perryman did not attempt to calculate the actual royalties Defendants currently pay on 802.11n products. *See* 6/11/13 a.m. Tr. at 64:19–65:3. Dr. Perryman even refused to provide a maximum hypothetical royalty a company should be expected to pay on an 802.11 product. 6/12/13 p.m. Tr. at 139:2–11. Dr. Shoemake attempted to calculate the number of patents related to the 802.11n standard, but he did not opine on a potential royalty stack on those patents. *See* 6/12/13 p.m. Tr. at 27:6–12.

Dr. Perryman identified one license to the 802.11n standard (the CSIRO license). *See* 6/12/13 p.m. Sealed Tr. at 8:8–21. Dr. Perryman found that Intel’s royalty obligation from the CSIRO license was \$0.13. *Id.* at 9:15–22. However, Dr. Perryman could not identify any further royalty obligations on 802.11n products. *See id.* at 12:22–13:6; 6/12/13 p.m. Tr. at 34:21–23 (Shoemake).

Defendants did not present any evidence any licensee ever complained to Ericsson about hold-up, and Mr. Brismark testified he never heard a licensee complain its royalty rate was the result of hold-up or lock-in. *See* 6/12/13 p.m. Tr. at 148:4–7 (Brismark); *id.* at 180:12–14 (Bone) (“Q: As part of your analysis, did you find that any of Ericsson’s actual agreements included holdup? A: No.”); *id.* at 183:2–8 (Bone); *id.* at 94:21–95:6, 96:13–22 (Leonard).

ii. Conclusions of Law

The paradox of RAND licensing is that it requires a patent holder to offer licenses on reasonable terms, but it offers no guidance over what is reasonable. *See Microsoft Corp. v. Motorola, Inc.*, 2013 WL 2111217, at *10 (W.D. Wash. Apr. 25, 2013). Thus, RAND creates an obligation that must be followed, but it provides no guidance on how to follow that obligation. This creates a situation ripe for judicial resolution. If two parties negotiating a RAND license are unable to agree to the financial terms of an agreement, it is entirely appropriate to resolve their dispute in court. *See Microsoft Corp. v. Motorola, Inc.*, 854 F. Supp. 2d 993, 1001–02 (W.D. Wash. 2012) (“Because the policies leave it to the parties to determine what constitutes a RAND license, when such a genuine disagreement arises, it appears to the court that the only recourse for the parties is to file a lawsuit in the appropriate court of law.”). A patent holder does not violate its RAND obligations by seeking a royalty greater than its potential licensee believes is reasonable. Similarly, a potential licensee does not violate its RAND obligations by refusing a royalty the patent holder believes is reasonable. Instead, both sides’ initial offers should be viewed as the starting point in negotiations. Even if a court or jury must ultimately determine an appropriate rate, merely seeking a higher royalty than a potential licensee believes is reasonable is not a RAND violation.

RAND licensing also includes an obligation to negotiate in good faith. This obligation is a two-way street. As potential licensees in a RAND negotiation, Defendants possessed an obligation to negotiate in good faith and earnestly seek an amicable royalty rate. They failed to do so. Defendants' entire argument boils down to the fact that they believed Ericsson's initial RAND offer was too high. However, Ericsson's \$0.50 offer was only the starting point in the negotiations. Defendants never meaningfully engaged Ericsson in RAND licensing negotiations after the initial offer. Further, the fact that the RAND rate was ultimately litigated in court does not make Ericsson's initial offer unreasonable. *Compare* 6/12/13 p.m. Tr. at 130:6–10 (Perryman) (“Q: Okay. Now, is Ericsson’s 50-cent rate so high in relation to the chip price that from an economic perspective, it amounts to a refusal to deal? A: Given all the technology in the chips, absolutely, yes, sir.”). Ericsson demonstrated the reasonableness of its offer by presenting substantial evidence of its licensing policies and its attempts to comply with RAND obligations.

Further, Defendants failed to present any evidence of *actual* hold-up or royalty stacking. Neither Dr. Perryman nor Dr. Shoemake calculated an actual royalty stack on the accused products or the 802.11n standard. Further, Dr. Perryman could only identify one “block” in the actual royalty stack. *See* 6/12/13 p.m. Sealed Tr. at 12:19–13:6. All of Defendants' concerns about royalty stacking were just that—concerns. Faced with no actual evidence of stacking, Defendants were forced to argue hypothetically. However, their hypothetical arguments would have carried more weight if Defendants presented any real evidence of stacking. Further, Ericsson presented evidence that it considered royalty stacking issues when it established its royalty rates. Accordingly, Ericsson's RAND rate did not fail to account for hold-up or royalty stacking.

Ericsson did not violate its RAND obligations by seeking a \$0.50 per unit royalty.

D. Injunctions for the Patents in Suit

Ericsson did not seek an injunction for the infringed patents. *See* Docket No. 527. Accordingly, there is no need for the Court to determine whether injunctions are available for the infringed patents. *See* Docket No. 588 at 15.

VII. Conclusion

For all the foregoing reasons, Ericsson's Motion for a Compulsory Future Royalty and Pre- and Post-Judgment Interest (Docket No. 527) is **GRANTED**. Defendants' Rule 50(b) Renewed Motion for Judgment as a Matter of Law in Favor of Defendants (Non-Infringement and Invalidity) and Motion for a New Trial (Docket No. 528) is **DENIED**. Defendants' Renewed Motion for Judgment as a Matter of Law on Ericsson's Damages Claims or, in the Alternative, for Vacatur, Remittitur or a New Trial on Damages (Docket No. 529) is **DENIED**. Defendants' Motion for Judgment on Post-Trial Findings of Fact and Conclusions of Law (Docket No. 588) is **GRANTED** as set forth above. Ericsson's Motion to Supplement the Record (Docket No. 589) is **GRANTED**. All other pending motions in this case are **DENIED**. The Clerk of Court is **ORDERED** to terminate all other pending motions.

So **ORDERED** and **SIGNED** this 6th day of August, 2013.

A handwritten signature in black ink, appearing to read 'Leonard Davis', written over a horizontal line.

LEONARD DAVIS
UNITED STATES DISTRICT JUDGE