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

VIRNETX INC. and SCIENCE APPLICATIONS INTERNATIONAL CORPORATION, §§§§	
Plaintiffs, §§	CASE NO. 6:12-CV-855
vs. §§§	
APPLE, INC., §§§	
Defendant. §	

ORDER

Before the Court is VirnetX, Inc. and Science Applications International Corp.'s (collectively, "VirnetX") Motion for Partial Summary Judgment on Apple, Inc.'s ("Apple") Invalidity Counterclaims Asserted in the Prior Litigation (Docket No. 149). The Court heard arguments regarding this Motion on May 20, 2014. Based on the parties' briefings and arguments, the Motion is **GRANTED IN PART** and **DENIED IN PART**.

BACKGROUND

This is the second case between VirnetX and Apple. The first case, "*Apple I*," was filed on August 11, 2010. *VirnetX, Inc. v. Cisco Systems, Inc., et al.*, No. 6:10-cv-417 (E.D. Tex. Aug. 11, 2010).[1] In *Apple I*, VirnetX accused two Apple product features of infringement: FaceTime and VPN On Demand. VirnetX originally asserted ninety claims from four patents.[2] Apple

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[1] Cisco Systems, Inc. was Apple's co-defendant in *Apple I*. The Court separated the defendants for trial. *Apple I*, Docket No. 542.

[2] VirnetX asserted U.S. Patent Nos. 6,502,135 ("the '135 Patent"), 7,418,504 ("the '504 Patent), 7,490,151 ("the '151 Patent), and 7,921,211 ("the '211 Patent). The '135 and '151 Patents generally describe a method of transparently creating a virtual private network ("VPN") between a client computer and a target computer, while the '504 and '211 Patents disclose a secure domain name service.

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originally asserted several theories of invalidity, including anticipation, obviousness, failure to comply with the written description requirement, derivation, and non-joinder.

The *Apple I* case proceeded to trial on October 31, 2012. As it does in many complex patent cases, the Court in *Apple I* encouraged and required the parties to narrow their cases for trial. Accordingly, VirnetX only presented sixteen patent claims at trial.[3] Similarly, the only invalidity theory Apple presented was anticipation based on a 1996 publication by Takahiro Kiuchi (the "Kiuchi reference"). However, the narrowing of Apple's case was only partially voluntary. Prior to trial, the Court disposed of Apple's derivation and non-joinder invalidity theories when it granted a motion for summary judgment filed by VirnetX. *Apple I*, Docket No. 555.

Following a five-day trial, the jury in *Apple I* found that the four asserted patents were not invalid and that Apple infringed the sixteen asserted claims. It awarded VirnetX $368,160,000 to compensate for Apple's infringement. The Court entered judgment on the jury's verdict. *Apple I*, Docket No. 732.

On the same day the jury reached a verdict in *Apple I*, VirnetX filed this action. In this case, VirnetX accuses the re-designed versions of the FaceTime and VPN on Demand features accused in *Apple I*, plus two features that were not at issue in the prior litigation: Per App VPN and iMessage. VirnetX originally asserted the same four patents as in *Apple I*, and later amended its complaint to assert two additional patents.[4] Docket Nos. 1, 58, 75. Apple contends that the asserted patents in this case are invalid, including the four patents asserted in *Apple I*. It no longer asserts anticipation based on the Kiuchi reference, which it presented at trial in *Apple I*,

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[3] At the *Apple I* trial, VirnetX presented claims 1, 3, 7, 8 of the '135 Patent; claims 1 and 13 of the '151 Patent; claims 1, 2, 5, 16, 21, and 27 of the '504 Patent; and claims 36, 37, 47 and 51 of the '211 Patent.

[4] VirnetX added U.S. Patent Nos. 8,0151,181 ("the '181 Patent") and 8,504,697 ("the '697 Patent"). The '181 Patent discloses a method of establishing a secure communication link, while the '697 Patent discloses a method of communicating between network devices.

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but reasserts other invalidity theories that it did not present at trial, including the derivation and non-joinder invalidity theories that the Court dismissed on summary judgment. VirnetX filed the current motion, requesting the Court to rule that issue and claim preclusion bar Apple's invalidity defenses in this case.

APPLICABLE LAW

Summary judgment shall be rendered when the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law. FED. R. CIV. P. 56(c); *Celotex Corp. v. Catrett*, 477 U.S. 317, 323–25 (1986); *Ragas v. Tenn. Gas Pipeline Co.*, 136 F.3d 455, 458 (5th Cir. 1998). An issue of material fact is genuine if the evidence could lead a reasonable jury to find for the non-moving party. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). In determining whether a genuine issue for trial exists, the court views all inferences drawn from the factual record in the light most favorable to the nonmoving party. *Id.*; *Matsushita Elec. Indus. Co. v. Zenith Radio*, 475 U.S. 574, 587 (1986).

If the moving party has made an initial showing that there is no evidence to support the nonmoving party's case, the party opposing the motion must assert competent summary judgment evidence of the existence of a genuine fact issue. *Matsushita*, 475 U.S. at 586. Mere conclusory allegations, unsubstantiated assertions, improbable inferences, and unsupported speculation are not competent summary judgment evidence. *See Eason v. Thaler*, 73 F.3d 1322, 1325 (5th Cir. 1996); *Forsyth v. Barr*, 19 F.3d 1527, 1533 (5th Cir. 1994). The party opposing summary judgment is required to identify evidence in the record and articulate the manner in which that evidence supports his claim. *Ragas*, 136 F.3d at 458. "Only disputes over facts that

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might affect the outcome of the suit under the governing laws will properly preclude the entry of summary judgment." *Anderson,* 477 U.S. at 248. Summary judgment must be granted if the nonmoving party fails to make a showing sufficient to establish the existence of an element essential to its case and on which it will bear the burden of proof at trial. *Celotex*, 477 U.S. at 322–23.

ANALYSIS

I. Claim Preclusion (*Res Judicata*)

VirnetX contends that claim preclusion bars Apple's invalidity defenses to any of the claims previously asserted in the *Apple I* case, including the seventy-four claims not presented at trial. The Fifth Circuit applies claim preclusion where: "(1) the parties are identical in the two actions; (2) the prior judgment was rendered by a court of competent jurisdiction; (3) there was a final judgment on the merits; and (4) the same claim or cause of action is involved in both cases." *Oreck Direct, LLC v. Dyson, Inc.*, 560 F.3d 398, 401 (5th Cir. 2009) (citation omitted).

The parties dispute mainly concerns the fourth element of claim preclusion, whether the same claim or cause of action is involved in both cases.[5] VirnetX argues that Apple is precluded from asserting invalidity in this case because Apple asserted invalidity in *Apple I*. Apple does not dispute that it raised an invalidity defense in *Apple I*. However, it contends that its invalidity defense is not precluded because VirnetX's infringement claims are different in this case. The parties' dispute centers on what qualifies as a "claim" to be precluded. VirnetX contends an invalidity defense qualifies as a separate "claim" for the purposes of claim preclusion; Apple argues the "claim" is based on infringement allegations.

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[5] The parties also dispute the second element of claim preclusion, whether the prior judgment was rendered by a court of competent jurisdiction. However, for the reasons discussed herein, the Court does not need to reach the parties' dispute with respect to the second element.

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Although regional circuit law governs claim preclusion generally, the question of whether an invalidity defense qualifies as a separate "claim" for the purposes of claim preclusion is "particular to patent law" and is to be decided based on the law of the U.S. Court of Appeals for the Federal Circuit. *Hallco Mfg. Co., Inc. v. Foster*, 256 F.3d 1290, 1294 (Fed. Cir. 2001). The Federal Circuit has held that "[a]n assertion of invalidity of a patent by an alleged infringer is not a 'claim' but a defense to the patent owner's 'claim.'" *Foster v. Hallco Mfg. Co., Inc.*, 947 F.2d 469, 479 (Fed. Cir. 1991). "[T]he right to pursue the invalidity defense in later litigation between the parties . . . depends on whether the underlying cause of action is different from the one brought earlier, which in turn depends on whether the [ ] devices [in the two cases] are essentially the same, or if any differences between them are merely colorable." *Hallco v. Foster*, 256 F.3d at 1297.

The accused devices in this case are Per App VPN, iMessage, FaceTime, and VPN on Demand. Per App VPN and iMessage were not at issue in *Apple I*. FaceTime and VPN on Demand have been re-designed since the prior case. Thus, the accused features in this and the prior case are not "essentially the same." Therefore, this case does not present the same "claim" as in *Apple I*.

Accordingly, claim preclusion does **NOT PRECLUDE** Apple from raising invalidity, under any theory, as a defense against any of the patent claims asserted in *Apple I*.

II.   Issue Preclusion (*Collateral Estoppel*)

Additionally, VirnetX asserts that issue preclusion bars Apple's invalidity defenses to the sixteen claims presented during the *Apple I* trial. A party is estopped from relitigating an issue when "(1) the issue under consideration is identical to that litigated in the prior action; (2) the issue was fully and vigorously litigated in the prior action; (3) the issue was necessary to support

the judgment in the prior case; and (4) there is no special circumstance that would make it unfair to apply the doctrine." *Copeland v. Merrill Lynch & Co., Inc.*, 47 F.3d 1415, 1422 (5th Cir. 1995). The judgment must be final to preclude relitigation of an issue. *Harvey Specialty & Supply, Inc. v. Anson Flowline Equip. Inc.*, 434 F.3d 320, 323 (5th Cir. 2005).

a. Invalidity Defenses Against Previously Tried Claims

The parties dispute the first element of issue preclusion, whether an identical issue exists. VirnetX argues that Apple is precluded from asserting invalidity in this case because that issue was decided in *Apple I*. As noted in the previous section, Apple does not dispute that it raised an anticipation defense at trial in *Apple I*. Docket No. 155 at 3. However, it claims that the invalidity theories it asserts in this case are not precluded because they are different from the invalidity theory it tried before the *Apple I* jury. The parties' dispute centers on the "issue" to be given preclusive effect. VirnetX contends patent invalidity is a single "issue" for preclusion purposes; Apple claims each invalidity theory is a separate "issue."

Although regional circuit law governs issue preclusion generally, the question of whether invalidity is a single "issue" for preclusion purposes is "particular to patent law" and is to be decided based on the law of the U.S. Court of Appeals for the Federal Circuit. *Applied Med. Res. Corp. v. U.S. Surgical Corp.*, 435 F.3d 1356, 1359–60 (Fed. Cir. 2006); *Evonik Degussa GmbH v. Materia Inc.*, No. 9-cv-636, 2014 WL 2967653, at *11 (D. Del. June 30, 2014); *see Hallco v. Foster*, 256 F.3d at 1294. However, the Federal Circuit has not yet explicitly addressed this matter. *Evonik*, 2014 WL 2967653, at *11. To support its proposition, Apple cites a recent case from the District of Delaware stating that "each theory of invalidity is a separate issue." *TASER Int'l, Inc. v. Karbon Arms, LLC*, No. 11-cv-426, 2013 WL 6705149, at *7 (D. Del. Dec. 19, 2013). However, "the overwhelming weight of authority suggests that the

'issue' that is to be given issue-preclusive effect to a judgment in the patent context is the ultimate determination on patent validity itself, not the sub-issues or the individual pieces of evidence and arguments that may have been necessary to support the validity determination." *Crossroads Sys. (Texas), Inc. v. Dot Hill Sys. Corp.*, No. A-03-CA-754-SS, 2006 WL 1544621, at *5 (W.D. Tex. May 31, 2006); *accord Evonik*, 2014 WL 2967653, at *12 (holding that "validity is a single issue" for preclusion purposes). In this case, Apple is again contesting the validity of the '135, '504, '151, and '211 Patents. Since this validity dispute is identical to the issue raised in *Apple I*, the first issue preclusion element is satisfied.

The second element of issue preclusion is not in dispute. Apple concedes that its anticipation defense based on Kiuchi was fully litigated in *Apple I*. Docket No. 155 at 3. The third element of issue preclusion is also satisfied. A finding that the claims presented during the *Apple I* trial were not invalid was necessary to the Court's judgment entered against those claims. *See Apple I*, Docket No. 732.

The parties dispute the final element of issue preclusion, whether a special circumstance would make it unfair to apply the doctrine. Apple argues that precluding its untried invalidity defenses would be unfair because it had to narrow its case for trial in *Apple I*. Docket No. 155 at 14.[6] However, Apple was not the only party encouraged to narrow its case. Both VirnetX and Apple were encouraged to narrow their cases for the *Apple I* trial and both parties voluntarily did so. Narrowing a case for trial involves strategic risk that the parties will choose unwisely from among their multiple claims and defenses. VirnetX originally asserted ninety claims but reduced that number to sixteen for trial. Claim preclusion now bars VirnetX from asserting, against the

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[6] Apple also notes that VirnetX has proposed claim constructions that would broaden some of the claims asserted in *Apple I* and this case. Thus, it argues, if the Court adopted these broader constructions, then issue preclusion would not apply to the broadened claims. Docket No. 155 at 15. However, Apple's concern is moot because the Court's claim construction order does not adopt VirnetX's broader proposed constructions for the claims previously construed in *Apple I*.

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same allegedly infringing conduct, the seventy-four claims that it dropped before trial. *See Brain Life, LLC v. Elekta Inc.*, 746 F.3d 1045, 1053 (Fed. Cir. 2014) (holding that the unopposed dismissal of patent claims without prejudice and entry of final judgment precluded subsequent assertion of those patent claims against the same allegedly infringing conduct). Likewise, Apple originally asserted several theories of invalidity but only presented an anticipation defense to the jury. However, Apple now asserts that it would be unfair to preclude its foregone *Apple I* defenses against the same patent claims in this subsequent litigation. On the contrary, it would be unfair if these defenses were not precluded. According to Apple's theory, plaintiffs would bear all of the risk inherent in narrowing a complex patent case in order to make trial practicable. The Court will not make an exception and require only one party to bear this burden. Accordingly, there is no special circumstance which would make it unfair to apply issue preclusion to Apple's asserted invalidity theories.

Alternatively, Apple argues that a stipulation between the parties during *Apple I* preserves its invalidity contentions. The stipulation recounts that during the pendency of that case, Apple released a new feature called iMessage. *Apple I*, Docket No. 551 at 1. Given the timing in the *Apple I* case, VirnetX and Apple agreed that iMessage would not be an accused feature in that case, but that VirnetX could assert claims against iMessage in a future litigation. *Id*. The stipulation goes on to state:

> Nothing in this agreement affects any other rights that Apple has to assert its affirmative defenses and counterclaims with respect to iMessage or any VirnetX patent that may be asserted against Apple.

Id.

This section of the stipulation does not grant Apple rights it would not otherwise have— namely, a second attempt at asserting invalidity. If the parties had wished to do so, they could

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have stipulated that the agreement preserved Apple's affirmative defenses and counterclaims to be reasserted in a later case. Instead, the stipulation states that "[n]othing in th[e] agreement affects" those affirmative defenses and counterclaims. *Id*. Because the stipulated agreement does not affect Apple's invalidity contentions, it does not preserve them.

Accordingly, Apple is **PRECLUDED** from asserting invalidity in this litigation against the patent claims that were tried before a jury in *Apple I*.

b. Derivation and Non-Joinder Invalidity Defenses Against Untried Claims

VirnetX argues that issue preclusion also bars VirnetX's derivation and non-joinder invalidity defenses to the seventy-four claims not presented at the *Apple I* trial. However, the Court refused to enter judgment on the claims and defenses not presented to the jury in that case. *Apple I*, Docket No. 732. Thus, the validity of the seventy-four untried claims was not necessary to the *Apple I* judgment. *See* 35 U.S.C. § 282(a) ("Each claim of a patent . . . shall be presumed valid independently of the validity of other claims . . . ."). Accordingly, Apple is **NOT PRECLUDED** from raising derivation and non-joinder defenses against the patent claims that were not tried before a jury in *Apple I*.

CONCLUSION

VirnetX's Motion for Partial Summary Judgment on Apple's Invalidity Counterclaims Asserted in the Prior Litigation (Docket No. 149) is **GRANTED IN PART** and **DENIED IN PART**. Although not barred under claim preclusion, the doctrine of issue preclusion **PRECLUDES** Apple from asserting invalidity as a defense against infringement of the claims that were tried before a jury in *Apple I*.[7] Apple is **NOT PRECLUDED** from asserting

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[7] At the *Apple I* trial, VirnetX presented claims 1, 3, 7, 8 of the '135 Patent; claims 1 and 13 of the '151 Patent; claims 1, 2, 5, 16, 21, and 27 of the '504 Patent; and claims 36, 37, 47 and 51 of the '211 Patent.

invalidity, under any theory, as a defense against infringement of the claims that were not tried

before a jury in *Apple I*.

    So ORDERED and SIGNED this 8th day of August, 2014.

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LEONARD DAVIS
UNITED STATES DISTRICT JUDGE

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

VIRNETX INC. AND SCIENCE APPLICATIONS INTERNATIONAL CORPORATION,	§ § § § §	
Plaintiffs,	§ §	**CASE NO. 6:12-CV-855**
vs.	§ §	
APPLE INC.,	§ § §	
Defendant.	§ §	

ORDER

Before the Court are the following motions:

- Plaintiff VirnetX, Inc.'s ("VirnetX") Motion to Compel Responses to VirnetX's Interrogatory No. 7 (Docket No. 184);

- VirnetX's Motion to Compel Document Production (Docket No. 194);

- Defendant Apple Inc.'s ("Apple") Motion for Partial Summary Judgment of Noninfringement by FaceTime (Docket No. 315);

- VirnetX's Motion to Strike Portions of the Opinion and Testimony of Mr. Christopher Bakewell (Docket No. 316);

- Apple's Motion to Exclude the Expert Opinion of Dr. Mark Jones (Docket No. 317);

- VirnetX's Motion to Exclude Portions of Dr. Matthew Blaze's Invalidity Report (Docket No. 318);

- VirnetX's Motion to Strike Portions of the Expert Report of Mr. James T. Carmichael (Docket No. 319);

- VirnetX's Motion for Partial Summary Judgment of No Invalidity on Dependent Claims of Previously Tried Claims (Docket No. 320);

- VirnetX's Motion for Partial Summary Judgment of No Invalidity Based on Derivation and Non-Joinder Theories (Docket No. 321);

- VirnetX's Motion for Summary Judgment of No Inequitable Conduct (Docket No. 322);

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- Apple's Motion to Exclude the Expert Damages Opinions of Mr. Roy Weinstein (Docket No. 323); and

- Apple's Motion to Strike VirnetX's Summary Judgment Briefing (Docket No. 326).

On January 7, 2016, the Court heard oral arguments regarding a variety of these motions. Based on the parties' briefing and argument, the Court rules as follows.

The Court **DENIES** VirnetX's Motion to Compel Responses to VirnetX's Interrogatory No. 7 (Docket No. 184). Apple is **ORDERED** to make the 30(b)(6) witness, which was offered during the hearing, available for deposition at VirnetX's convenience. To the extent that this deposition does not allow VirnetX to adequately test the details of a non-infringing alternative, and a witness for Apple discusses that non-infringing alternative at trial, VirnetX may request the Court's permission to ask an Apple witness about previous misrepresentation concerning the non-infringing alternatives in Case No. 6:10-cv-417.

The Court **DENIES** VirnetX's Motion to Compel Document Production (Docket No. 194). However, the Court will carefully consider any objections from VirnetX where Apple criticizes a VirnetX witness for not considering specific usage sought by VirnetX in this motion.

The Court **DENIES** Apple's Motion for Partial Summary Judgment of Noninfringement by FaceTime (Docket No. 315), with opinion to follow. Apple has not shown the absence of a genuine issue of material fact as to whether FaceTime infringes the asserted patents.

The Court **GRANTS** VirnetX's Motion to Strike Portions of the Opinion and Testimony of Mr. Christopher Bakewell (Docket No. 316), with opinion to follow. Mr. Bakewell's new method of calculating damages does not sufficiently relate to the consolidation of Case Nos. 6:10-cv-417 and 6:12-cv-855.

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The Court **DENIES** Apple's Motion to Exclude the Expert Opinion of Dr. Mark Jones (Docket No. 317). Although Apple presents valid criticisms of Dr. Jones's opinions, they go to the weight of the evidence rather than admissibility.

The Court **DENIES** VirnetX's Motion to Exclude Portions of Dr. Matthew Blaze's Invalidity Report (Docket No. 318). With respect to Dr. Blaze's invalidity defenses for the asserted claims of Case No. 6:10-cv-417, Apple states it will not present an invalidity defense for these previously tried claims. In addition, Dr. Blaze's opinion on conception of the invention is admissible.

At the hearing, VirnetX withdrew its Motion to Strike Portions of the Expert Report of Mr. James T. Carmichael (Docket No. 319). Therefore, this motion is **DENIED AS MOOT**.

The Court **GRANTS-IN-PART** and **DENIES-IN-PART** VirnetX's Motion for Partial Summary Judgment of No Invalidity on Dependent Claims of Previously Tried Claims (Docket No. 320), with opinion to follow. This Motion is **GRANTED** with respect to Apple's anticipation and obviousness defenses and **DENIED** as to the derivation and non-joinder defenses.

The Court **DENIES** VirnetX's Motion for Partial Summary Judgment of No Invalidity Based on Derivation and Non-Joinder Theories (Docket No. 321). When viewing the facts in the light most favorable to Apple, the Schulzrinne Presentation creates a question of fact as to whether the named inventors of the asserted patents derived their invention from Dr. Henning Schulzrinne.

The Court **GRANTS** VirnetX's Motion for Summary Judgment of No Inequitable Conduct (Docket No. 322), with opinion to follow. Based on the evidence presented, the single

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most reasonable inference is not that Mr. Toby Kusmer had a specific intent to deceive the U.S. Patent and Trademark Office.

The Court **DENIES** Apple's Motion to Exclude the Expert Damages Opinions of Mr. Roy Weinstein (Docket No. 323). Although Apple presents valid criticisms of Mr. Weinstein's opinions, they go to the weight of the evidence rather than its admissibility. The Court will be in a better position to evaluate Apple's criticisms, including how VirnetX uses the disputed survey, during Mr. Weinstein's testimony.

The Court **DENIES** Apple's Motion to Strike VirnetX's Summary Judgment Briefing (Docket No. 326). However, the Court is concerned with VirnetX's 29-page motion for summary judgment of no inequitable conduct. In this instance, VirnetX did not file a motion requesting additional pages to brief its motion as it did for its motion *in limine* responses (Docket No. 314). VirnetX states that it did not need to request leave to file additional pages because its motion for summary judgment of no inequitable conduct should be considered case dispositive pursuant to Local Rule CV-7. This argument should have been made prior to, or at least concurrent with, VirnetX filing its motion for summary judgment of no inequitable conduct. By filing the 29-page motion as is, VirnetX prevented the Court from ordering it to simply re-file the motion within the required page limits. Similarly, Apple was essentially forced to concede to VirnetX's interpretation of the Local Rules because of the short briefing schedule (*see* Docket No. 340). Although striking VirnetX's summary judgment briefing is too severe in this situation, the Court **ORDERS** the parties to meet and confer to determine an appropriate remedy. The parties shall file a joint proposal detailing their positions on a remedy by **January 15, 2016 by 5:00 p.m.**

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SIGNED this 11th day of January, 2016.

ROBERT W. SCHROEDER III
UNITED STATES DISTRICT JUDGE

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

	§	
VIRNETX INC. AND SCIENCE	§	
APPLICATIONS INTERNATIONAL	§	
CORPORATION,	§	
	§	
	§	
Plaintiffs,	§	**CASE NO. 6:12-CV-855**
	§	
vs.	§	
	§	
APPLE INC.,	§	
	§	
Defendant.	§	

MEMORANDUM OPINION

On January 7, 2016, the Court heard oral argument on various motions. This document

provides the written opinion of the Court's prior rulings on January 11, 2016. *See* Docket No.

362. This opinion addresses: (1) Defendant Apple Inc.'s ("Apple") denied Motion for Partial

Summary Judgment of Noninfringement by FaceTime (Docket No. 315); (2) Plaintiff VirnetX

Inc.'s ("VirnetX") granted-in-part and denied-in-part Motion for Partial Summary Judgment of

No Invalidity on Dependent Claims of Previously Tried Claims (Docket No. 320); (3) VirnetX's

granted Motion for Summary Judgment of No Inequitable Conduct (Docket No. 322); and (4)

VirnetX's granted Motion to Strike Portions of the Opinion and Testimony of Mr. Christopher

Bakewell (Docket No. 316).

1. **Apple's Motion for Partial Summary Judgment of Noninfringement by FaceTime (Docket No. 315)**

Summary judgment shall be rendered when there is no genuine issue of material fact and

the moving party is entitled to judgment as a matter of law. FED. R. CIV. P. 56(c); *Celotex Corp.*

v. Catrett, 477 U.S. 317, 322–25 (1986); *Ragas v. Tenn. Gas Pipeline Co.*, 136 F.3d 455, 458

(5th Cir. 1998). An issue of material fact is genuine if the evidence could lead a reasonable jury

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to find for the non-moving party. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). In determining whether a genuine issue of fact exists, a court views all inferences drawn from the factual record in the light most favorable to the nonmoving party. *Matsushita Elec. Indus. Co., Ltd. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986).

In a summary judgment motion, Apple argued that the FaceTime feature does not infringe because it is not anonymous as required by the claim term "secure communication link." Docket No. 352 at 1; *see VirnetX, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1319 (Fed. Cir. 2014) (construing "secure communication link" as "a direct communication link that provides data security and anonymity"). Apple first explained that, in the specifications of the patents asserted against the FaceTime feature, the preferred embodiment requires "anonymity" by describing a first layer of obfuscation for content and a second layer of obfuscation for source and destination Internet Protocol ("IP") addresses. Docket No. 352 at 1. Apple concluded that FaceTime is not anonymous because it does not conceal IP addresses as described in the patent specifications. Docket No. 315 at 1. Apple stated that VirnetX incorrectly interpreted "anonymity" as the inability to "correlate" a person or machine to an IP address, instead of as "concealment of source and designation IP addresses." Docket No. 352 at 5.

Apple effectively asked the Court to further construe a "secure communication link" as implementing a particular process of providing anonymity. *See* Docket No. 315 at 4–7. The particular examples of providing anonymity to a communication link disclosed in the patent specifications should not limit the claims. *See VirnetX*, 767 F.3d at 1319. Based on how the FaceTime feature operates, a jury determined what degree of anonymity is sufficient to infringe the claims. Therefore, a genuine issue of material fact existed as to whether the FaceTime feature satisfied the "anonymity" requirement of the asserted claims.

Apple further stated that Network Address Translations ("NATs"), which were relied on by VirnetX in one of its two "anonymity" theories, are not part of the FaceTime feature.[1] Docket No. 352 at 1–3. The only specific argument that Apple identified as support for NATs being distinct from the FaceTime feature is third party control. *Id*. at 1–2. Apple described a NAT as a "new device." *Id*. at 2. However, the asserted claims are not directed to a single device. *E.g.*, U.S. Patent No. 7,921,211 ("the '211 Patent") at claim 1 (claiming a system). In addition, Apple did not provide support of its position that the introduction of another component, which is not under Apple's control, negates infringement of the FaceTime feature. *See* Docket No. 352 at 2.

Apple next argued that NATs do not provide the necessary "anonymity" because private and public IP addresses are the same; however, Apple did not explain in what respects the IP addresses are the same. *Id*. at 3. Further, Apple did not claim that the IP addresses are identical, and a description of an IP address as public or private appears to provide some meaning as to how it operates. *See* Docket No. 336 at 4.

Apple also stated that NATs do not provide anonymity because a communication link contains a participant's private IP address before it interacts with a NAT. Docket No. 352 at 3–4. During this window before a communication reaches a NAT, the participant's private IP address is allegedly accessible by eavesdroppers. *Id*. VirnetX retorted that, when eavesdroppers intercept packets of an ongoing FaceTime call between participating devices located behind NATs (*i.e.*, after the packets reach the NATs), eavesdroppers cannot correlate a device to a participant. *See* Docket No. 336 at 4, n.1. A reasonable jury could have found that the IP address conversion performed by a NAT early in the communication's path is sufficient to establish anonymity.

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[1] In addition, Apple disagreed with VirnetX's characterization of anonymous because it would encompass NAT technology that was invented before the asserted patents. Docket No. 352 at 4. This is an invalidity position, which is unrelated to noninfringement.

Apple also shed doubt on VirnetX's second basis for "anonymity" within the FaceTime feature—the call setup process establishing "anonymity" of a communication. Apple stated that any anonymity established during the call setup process is irrelevant because it is the secure communication link that must be anonymous. Docket No. 352 at 4–5. VirnetX responded that the call setup process creates a secure communication link for the remainder of the communication. *Id.* Drawing all inferences in the light most favorable to VirnetX, a reasonable jury could have found that the call setup process establishes anonymity.

Apple finally argued that the construction of "domain name service system" incorporates the Court's construction of "domain name service." Docket No. 365 at 54:24–59:13; *see also* Docket No. 369 (VirnetX filing an Emergency Motion to Clarify Under *O2 Micro*). Apple relied on previous Court proceedings in attempting to infer that the construction of a "domain name service system" was meant to include the construction of a "domain name service." However, the Court previously interpreted "domain name service" and "domain service system" as separate terms with different constructions. Case No. 6:10-cv-417 ("*Apple I*"), Docket No. 266 at 15, 20. These two separate terms generally appear in different contexts: the claim preamble versus the body of the claim. Docket No. 369 at 8–10; *e.g.,* '211 Patent at claims 1, 36. Accordingly, the original constructions of "domain name service system" and "domain name service" continue to apply.

Apple did not demonstrate the absence of a genuine issue of material fact as to whether the FaceTime feature infringed the asserted patents. Accordingly, the Court denied Apple's Motion for Partial Summary Judgment of Noninfringement by FaceTime (Docket No. 315). Docket No. 362.

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2. **VirnetX's Motion for Partial Summary Judgment of No Invalidity on Dependent Claims of Previously Tried Claims (Docket No. 320)**

VirnetX filed a motion for partial summary judgment based upon the *Apple I* jury finding of no invalidity of the asserted claims. Docket No. 320. VirnetX argued that, because the independent claims in U.S. Patent No. 7,418,504 ("the '504 Patent") and the '211 Patent were found not invalid in *Apple I*, the five newly asserted claims that depend from the previously tried claims must also be not invalid. *Id*. at 4–6. VirnetX submitted that, if a claim is not invalid, a claim that depends from it also cannot be invalid because it is narrower in scope. *Id*. at 5–6. More specifically, VirnetX alleged that the five newly asserted dependent claims are not invalid under (1) anticipation; (2) obviousness; (3) derivation; or (4) nonjoinder. Docket No. 359 at 1.

The newly asserted dependent claims are not captured by issue preclusion, because "[e]ach claim of a patent . . . shall be presumed valid independently of the validity of other claims." *See* 35 U.S.C. § 282(a). Although issue preclusion does not dictate that the newly asserted dependent claims are not invalid as anticipated and obvious, the relationship between the scope of independent claims and that of dependent claims does.

A dependent claim further defines an independent claim. *See* 35 U.S.C. § 112(d); 37 C.F.R. § 1.75(c). In other words, the scope of subject matter captured by an independent claim is broader than a claim that depends from it. *See* 35 U.S.C. § 112(d); 37 C.F.R. § 1.75(c). In the context of anticipation, if a reference does not read on the limitations of an independent claim, it cannot read on the limitations of a dependent claim that includes additional requirements. *See Aspex Eyewear, Inc*. *v*. *Zenni Optical, Inc*., 713 F.3d 1377, 1381 (Fed. Cir. 2013). This is also true of obviousness. *See id*. If an independent claim is nonobvious, then a claim that depends from it is also nonobvious. *See id*.

In contrast to anticipation and obviousness, invalidity based upon derivation from another and nonjoinder of all inventors is not similarly limited by the relationship between independent and dependent claims. If the inventive entity of an independent claim is accurate, a claim that depends from it may not have the same inventive entity. *See* 25 U.S.C. § 116(a). For instance, an inventor may contribute to a patent by conceiving a limitation that is only present in a dependent claim. *See id.* A particular limitation in a dependent claim could be derived from another or cause an inventor to be excluded from a patent, while the inventive entity may accurately reflect the inventors of an independent claim. *See id.*

Accordingly, this motion (Docket No. 320) was granted with respect to Apple's anticipation and obviousness defenses and denied as to its derivation and nonjoinder defenses. Docket No. 362.

3. Granting VirnetX's Motion for Summary Judgment of No Inequitable Conduct (Docket No. 322)

"Inequitable conduct resides in failure to disclose material information, or submission of false material information, with an intent to deceive, and those two elements, materiality and intent, must be proven by clear and convincing evidence." *Kingsdown Med. Consultants, Ltd. v. Hollister Inc.*, 863 F.2d 867, 872 (Fed. Cir. 1988). "Intent and materiality are separate requirements." *See Therasense, Inc. v. Becton, Dickinson & Co.*, 649 F.3d 1276, 1290 (Fed. Cir. 2011) (en banc). But-for materiality is required to establish inequitable conduct. *Id.* at 1291.

"When an applicant fails to disclose prior art to the [U.S. Patent and Trademark Office ("Patent Office")], that prior art is but-for material if the [Patent Office] would not have allowed a claim had it been aware of the undisclosed prior art." *Id.* "Hence, in assessing the materiality of a withheld reference, a court must determine whether the [Patent Office] would have allowed the claim if it had been aware of the undisclosed reference." *Id.*

When examining the intent to deceive requirement, the alleged conduct must be "viewed in light of all the evidence, including evidence indicative of good faith." *Kingsdown*, 863 F.2d at 876. To demonstrate the intent requirement of inequitable conduct, "the single most reasonable inference able to be drawn from the evidence" must be a specific intent to deceive the Patent Office. *Therasense*, 649 F.3d at 1290. This standard applies at the summary judgment stage. *ROY-G-BIV Corp. v. ABB, Ltd.*, 63 F. Supp. 3d 690, 695 (E.D. Tex. 2014). Intent may be shown from indirect and circumstantial evidence. *Therasense*, 649 F.3d at 1290.

In its motion, VirnetX addressed a number of issues, including an explanation of why the single most reasonable inference is not that VirnetX's prosecuting attorney, Mr. Toby Kusmer, had an intent to deceive the Patent Office. Docket No. 322 at 7–8. VirnetX explained that there was no intent to deceive the Patent Office when Mr. Kusmer allegedly: (1) disclosed too much information to the Patent Office; (2) failed to disclose evidence from related patents in Case No. 6:07-cv-80 ("the *Microsoft* litigation") and reexamination proceedings initiated by Apple; and (3) made misleading statements during prosecution regarding the publication date of a prior art reference by Aventail ("the Aventail reference"). *Id*. at 7–21.

Apple responded by stating, among other things, that the intent requirement for inequitable conduct was well-supported by the evidence. Docket No. 339 at 20. Apple identified evidence that it believed supported inferring an intent to deceive the Patent Office. *Id*. at 20–21. Apple's alleged evidence was the following: (1) Mr. Kusmer incorrectly told the Patent Office that the publication date of the Aventail reference was not discussed during the *Microsoft* litigation; (2) Mr. Kusmer withheld testimony from the *Microsoft* litigation during prosecution of U.S. Patent Nos. 8,051,181 and 8,504,697 ("the '181 Patent" and "the '697 Patent," respectively); (3) Mr. Kusmer misled the Patent Office by inundating it with

approximately 132,500 pages of documents, which were listed on information disclosure statements; (4) Mr. Kusmer admitted he did not review all of the documents listed on the information disclosure statements before submitting them to the Patent Office; (5) Mr. Kusmer lulled the Patent Office into a false sense of complacency by promising to notify it of any evidence of the Aventail reference publication date, but then failed to do so; (6) Mr. Kusmer withheld the three reexamination declarations during prosecution of the '181 Patent; and (7) Mr. Kusmer described the three reexamination declarations related to the publication date of the Aventail reference as "insufficient" during prosecution of the '697 Patent. *Id*. at 20–21.

During the *Microsoft* litigation, the publication date of the Aventail reference was discussed in the context of a confidential deposition transcript. *See* Docket No. 322 at 10–11. Mr. Kusmer had no obligation to disclose documents under the protection of a protective order to the Patent Office. *See id*. With respect to the documents listed on the information disclosure statements, Apple did not indicate how Mr. Kusmer intended to deceive the Patent Office other than by filing information disclosure statements that totaled many pages and were not reviewed by him personally before being filed.[2] *See* Docket No. 339 at 20. Further, the examiner rejected the pending claims using the Aventail reference during prosecution of the '697 Patent, which indicates that the Aventail reference was not hidden from the Patent Office. *See id*. at 11.

Mr. Kusmer promised to update the Patent Office with information relevant to the publication date of the Aventail reference, and did so. *See id*. at 11–12. Apple's main complaint appears to be the speed with which he updated the Patent Office. *See id*. Mr. Kusmer received the three declarations from Apple's reexamination filings a few days before a notice of allowance was mailed for the '181 Patent. *See* Docket No. 322 at 13. However, Mr. Kusmer

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[2] The Aventail reference was listed on a supplemental information disclosure statement with twenty-seven other references. *See* Docket No. 322 at 3 n.1.

brought the three declarations addressing the publication date of the Aventail reference to the examiner's attention during prosecution of the '697 Patent, which issued after the '181 Patent. *See* Docket No. 339 at 11–12. Additionally, the parties continue to dispute the Aventail reference publication date. See Docket No. 322 at 17.

In view of the foregoing, the single most reasonable inference was not that Mr. Kusmer had an intent to deceive the Patent Office by not disclosing the declarations. Therefore, the Court granted VirnetX's Motion for Summary Judgment of No Inequitable Conduct (Docket No. 322). Docket No. 362.

4.   Granting VirnetX's Motion to Strike Portions of the Opinion and Testimony of Mr. Christopher Bakewell (Docket No. 316)

In the consolidation order, the Court warned that "while there is substantial overlap between the two cases, incorporating the issues remanded in *Apple I* may require limited and focused fact discovery, as well as supplemental expert reports." Docket No. 220 at 1–2. As a result, Apple served several interrogatories and requests for admission on VirnetX. Docket No. 333 at 4. Apple then supplemented the report of its damages expert, Mr. Christopher Bakewell. *Id*.

In its motion to strike, VirnetX stated that Mr. Bakewell improperly supplemented his report under the ruse that it was related to the Court's consolidation of *Apple I* and Case No. 6:12-cv-855 ("*Apple II*"). Docket No. 316 at 5. As VirnetX described it, Mr. Bakewell's supplemental expert report introduced a new damages model based on a per-feature-per-product amount, or "a reasonable royalty rate that applies to each of the three accused features [was] $0.017 per unit (*i.e.*, each worth one-third of $0.05 per unit)." *Id*. at 3. Apple responded by explaining that the supplemental report accounts for the multiple versions of Virtual Private Network ("VPN") On Demand and FaceTime that would be at issue in the newly consolidated

case. Docket No. 333 at 5–6. According to Apple, because the cases were consolidated, a distinction needed to be made between the value of various versions of VPN On Demand and FaceTime and this somehow also affected the reasonable royalty if less than three infringing features were on a product. *Id*.

If Mr. Bakewell intended to present information about the relative value of the accused features (*i.e.*, VPN On Demand, FaceTime, or iMessage), that information should have already been included in an earlier expert report. Before the cases were consolidated, Mr. Bakewell's expert report addressed all three accused features. *See* Docket No. 316 at 2. Further, the post-consolidation discovery collected by Apple does not justify a shift to determining a royalty rate based on the number of infringing features on a product. *See* Docket No. 333 at 4.

Mr. Bakewell's new method of calculating damages did not sufficiently relate to the consolidation of *Apple I* and *Apple II*. Accordingly, the Court granted VirnetX's motion (Docket No. 316). Docket No. 362.

SIGNED this 22nd day of March, 2016.

ROBERT W. SCHROEDER III
UNITED STATES DISTRICT JUDGE

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

VIRNETX INC.,	§	
	§	
Plaintiff,	§	CIVIL ACTION NO. 6:12-CV-00855-
	§	RWS
v.	§	
	§	
APPLE INC.,	§	
	§	
Defendant.	§	
	§	

JURY INSTRUCTIONS

1.   **Introduction**

MEMBERS OF THE JURY:

You have now heard the evidence in this case, and I will instruct you now on

the law that you must apply. It is your duty to follow the law as I give it to you. On

the other hand, you, the jury, are the sole judges of the facts. Do not consider any

statement that I may have made during the trial or make in these instructions as an

indication that I have any opinion about the facts of the case. After I instruct you on

the law, as I suggested, the attorneys will have an opportunity to make their closing

arguments. Statements and argument of the attorneys are not evidence and are not

instructions on the law. They are intended only to assist you in understanding the

evidence and what the parties' contentions are.

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1.1 General Instruction

A verdict form has been prepared for you, and you will take this form with you to the jury room. And when you have reached a unanimous agreement as to your verdict, you will have your foreperson fill in, date, and sign the form.   At the end of the instructions, I will take you through the verdict form before the parties begin their closing arguments. Answer each question on the verdict form from the facts as you find them. Do not decide who you think should win and then answer the questions accordingly. A corporation and all other persons are equal before the law and must be treated as equals in a court of justice. With respect to each question asked, your answers and your verdict must be unanimous.

In determining whether any fact has been proven in this case, you may, unless otherwise instructed, consider the testimony of all witnesses regardless of who may have called them and all exhibits received in evidence regardless of who may have produced them. At times during the trial, it was necessary for the Court to talk with the lawyers here at the bench out of your hearing or by calling a recess.   We met at the bench or when you were in the jury room because during trial, sometimes things come up that don't involve the jury. You should not speculate on what was discussed during such times. You are the jurors, and you are the sole judges of the credibility of all the witnesses and the weight and effect of all evidence. By the Court allowing testimony or other evidence to be introduced over the objection of an

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attorney, the Court did not indicate any opinion as to the weight or effect of such evidence.

1.2 Considering Witness Testimony

You alone are to determine the questions of credibility or truthfulness of the witnesses. In weighing the testimony of the witnesses, you may consider the witness's manner and demeanor on the witness stand, any feelings or interest in the case, or any prejudice or bias about the case, that he or she may have, and the consistency or inconsistency of his or her testimony considered in the light of the circumstances. Has the witness been contradicted by other credible evidence? Has he or she made statements at other times and places contrary to those made here on the witness stand? You must give the testimony of each witness the credibility that you think it deserves.

Even though a witness may be a party to the action and therefore interested in its outcome, the testimony may be accepted if it is not contradicted by direct evidence or by any inference that may be drawn from the evidence, if you believe the testimony.

You are not to decide this case by counting the number of witnesses who have testified on the opposing sides. Witness testimony is weighed; witnesses are not counted. The test is not the relative number of witnesses, but the relative convincing force of the evidence. The testimony of a single witness is sufficient to prove any

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fact, even if a greater number of witnesses testified to the contrary, if after considering all of the other evidence, you believe that witness.

1.3   Impeachment by Witness's Inconsistent Statements

In determining the weight to give to the testimony of a witness, consider whether there was evidence that at some other time the witness said or did something, or failed to say or do something, that was different from the testimony given at the trial.

A simple mistake by a witness does not necessarily mean that the witness did not tell the truth as he or she remembers it. People may forget some things or remember other things inaccurately. If a witness made a misstatement, consider whether that misstatement was an intentional falsehood or simply an innocent mistake. The significance of that may depend on whether it has to do with an important fact or with only an unimportant detail.

1.4   How to Examine the Evidence

Certain testimony in this case has been presented to you through a deposition. A deposition is the sworn, recorded answers to questions asked to a witness in advance of the trial. Under some circumstances, if a witness cannot be present to testify from the witness stand, the witness testimony may be presented under oath in the form of a deposition. Sometime before this trial, attorneys representing the parties in this case questioned this witness under oath. A court reporter was present

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and recorded the testimony. This deposition testimony is entitled to the same consideration and is to be judged by you as to the credibility and weight and otherwise considered by you insofar as possible the same as if the witness had been present and had testified from the witness stand in court.

While you should consider only the evidence in this case, you are permitted to draw such reasonable inferences from the testimony and exhibits as you feel are justified in the light of common experience. In other words, you may make deductions and reach conclusions that reason and common sense lead you to draw from the facts that have been established by the testimony and evidence in the case. The testimony of a single witness may be sufficient to prove any fact, even if a greater number of witnesses may have testified to the contrary, if after considering all the other evidence you believe that single witness.

There are two types of evidence that you may consider in properly finding the truth as to the facts in this case. One is direct evidence, such as testimony of an eyewitness. The other is indirect or circumstantial evidence, the proof of a chain of circumstances that indicates the existence or non-existence of certain other facts. As a general rule, the law makes no distinction between direct and circumstantial evidence, but simply requires that you find the facts from all of the evidence, both direct and circumstantial.

The parties have stipulated, or agreed, to some facts in this case. When the lawyers on both sides stipulate to the existence of a fact, you must, unless otherwise instructed, accept the stipulation as evidence and regard the fact as proved. Apple agrees that a prior VPN On Demand "always" mode feature infringed the '135 and '151 patents, and a prior version of the FaceTime feature infringed the '504 and '211 patents. Infringement and damages for those features are not at issue in this case. Those two features have been redesigned. VirnetX contends that those redesigns infringe. Apple disputes VirnetX's contentions. As I explained to you at the beginning of the case, a party may attempt to change the design of existing products or methods so they do not fall within the boundaries of those claims. If that change in fact causes the product or method to fall outside of those boundaries, the product or method would no longer infringe the claims.

1.5 Objections to Evidence

Attorneys representing clients in courts such as this one have an obligation in the course of trial to assert objections when they believe testimony or evidence is being offered that is contrary to the rules of evidence. The essence of a fair trial is that it be conducted pursuant to the rules of evidence and that your verdict be based only on legally admissible evidence. So you should not be influenced by the objection or by the Court's ruling on it. If the objection is sustained, then ignore the

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question. If the objection is overruled, then you may treat the answer to that question just as you would treat the answer to any other question.

1.6   Expert Witnesses

When knowledge of a technical subject matter may be helpful to the jury, a person who has special training or experience in that technical field, he or she is called an expert witness, is permitted to state his or her opinion on those technical matters. However, you are not required to accept that opinion. As with any other witness, it is up to you to decide whether the witness's testimony is believable or not, whether it is supported by the evidence, and whether to rely upon it. In deciding whether to accept or rely upon the opinion of an expert witness, you may consider any bias of the witness.

2.   Contentions of the Parties

I will first give you a summary of each side's contentions in this case. I will then tell you what each side must prove to win on these issues.

VirnetX seeks damages from Apple for allegedly infringing certain claims of four VirnetX patents—specifically the '504, '211, '135, and '151 patents. VirnetX contends that Apple has made, used, sold, or offered for sale in the United States, or imported into the United States, products that practice the asserts claims of these patents. Specifically, VirnetX contends that:

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Apple's redesigned VPN on Demand feature infringes claim 1 and 7 of the '135 patent and claim 13 of the '151 patent.

Apple's redesigned FaceTime feature infringes claims 1, 2, 5, and 27 of the '504 and claims 36, 47, and 51 of the '211 patent.

VirnetX seeks damages in the form of a reasonable royalty for this infringement. VirnetX also contends that Apple induces this infringement.

In response to VirnetX's infringement contentions, Apple contends that these features do not infringe any claim of VirnetX's patents. Apple further contends that it has not induced any other party's infringement. Because Apple contends that the VPN On Demand and FaceTime features at issue in this case do not infringe, Apple further contends that VirnetX is not entitled to damages.

3.   Burdens of Proof

As I told you at the beginning of this trial, in any legal action, facts must be proved by a required amount of evidence known as the "burden of proof." The burden of proof in this case is on VirnetX. VirnetX has the burden of proving infringement and damages by a preponderance of the evidence. Preponderance of the evidence means the evidence that persuades you that a claim is more likely true than not true. If the proof establishes that all parts of one of VirnetX's infringement claims are more likely true than not true, then you should find for VirnetX as to that claim. But if you find that VirnetX has failed to prove any part of its claim is more

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likely than not true, then VirnetX may not recover on its claim. In determining whether any fact has been proved by a preponderance of the evidence, you may, unless otherwise instructed, consider the stipulations, the testimony of all witnesses, regardless of who may have called them, and all exhibits received in evidence, regardless of who may have produced them.

4.   The Patent Claims

Before you can decide many of the issues in this case, you will need to understand the role of patent "claims." The patent claims are the numbered sentences at the end of each patent. The claims are important because it is the words of the claims that define what a patent covers. The figures and text in the rest of the patent provide a description and/or examples of the invention and provide a context for the claims. But it is the claims that define the breadth of the patent's coverage. Each claim is effectively treated as if it were a separate patent. And each claim may cover more or less than another claim. Therefore, what a patent covers depends in turn on what each of its claims covers.

You will first need to understand what the Asserted Claims cover in order to decide whether or not there is infringement. The law says that it is the Court's role to define the terms of the claims and it is your role to apply these definitions to the issues that you are asked to decide in this case. Therefore, as I explained to you at the start of the case, I have determined the meaning of certain claim terms at issue

in this case. And I have provided you those definitions of those terms in your juror notebook. You must accept the definitions of these words in the claims as being correct. It is your job to take these definitions and apply them to the issues that you are deciding, including infringement. The claim language I have not interpreted for you in your notebook is to be given its ordinary and accustomed meaning as understood by one of ordinary skill in the art.

You have also heard discussion about a construction for the word "domain name service." You are instructed that the construction for "domain name service system," an element of all of the asserted claims of the '504 and '211 patents, does not incorporate or include the Court's construction for the term "domain name service."

4.1 How a Patent Claim Defines What It Covers

I will now explain how a patent claim defines what it covers. A claim sets forth, in words, a set of requirements. Each claim sets forth its requirements in a single sentence. If a device or system satisfies each of these requirements then it is covered by the claim. In patent law, the requirements of a claim are often referred to as "claim elements" or "claim limitations." When a thing, such as a feature, product, process, or system meets all of the requirements of a claim, the claim is said to "cover" that thing, and that thing is said to "fall" within the scope of that claim. In other words, a claim covers a feature, product, process, or system where each of the

claim elements or limitations is present in that feature, product, process, or system. Conversely, if the feature, product, process, or system meets only some, but not all, of the claim elements or limitations, then that feature, product, process, or system is not covered by the claim.

4.2 Independent and Dependent Claims

This case involves two types of patent claims: Independent claims and dependent claims.

An "independent claim" sets forth all of the requirements that must be met in order to be covered by that claim. Thus, it is not necessary to look at any other claim to determine what an independent claim covers. In this case, for example, Claim 1 of the '504 patent is an independent claim.

Other claims in the case are "dependent claims." In this case, for example, Claim 2 of the '504 patent depends from Claim 1. A dependent claim refers to another claim and includes all the requirements or parts of the claim to which it refers. The dependent claim then adds its own additional requirements. In this way, the claim "depends" on another claim. To determine what a dependent claim covers, it is necessary to look at both the dependent claim and any other claims to which it refers. A product, feature, method or system that meets all of the requirements of both the dependent claim and the claims to which it refers is covered by that dependent claim.

4.3 Open-Ended or "Comprising" Claims

The beginning portion, or preamble, to some of the claims uses the word "comprising." "Comprising" and "comprises" mean "including but not limited to, "or "containing but not limited to." Thus, if you decide that an accused feature includes all the requirements in that claim, the claim is infringed. This is true even if the accused instrumentality includes components in addition to those requirements. For example, a claim to a table comprising a tabletop, legs, and glue would be infringed by a table that includes a tabletop, legs, and glue, even if the table also includes wheels on the table's legs.

5. Infringement – Generally

Patent law gives the owner of a valid patent the right to exclude others from importing, making, using, offering to sell, or selling the patented invention. Any person or business entity that has engaged in any of those acts without the patent owner's permission infringes the patent.

You can have more than one patent governing an area of technology, although it may relate to different aspects of that technology. The mere fact that Apple has patents related to part of the technology of the accused features is not a defense to the fact that someone else may have a patent related to another part of those features.

I will now instruct you as to the rules you must follow when deciding whether VirnetX has proven that Apple infringed the Asserted Claims.

5.1 Direct Infringement- Literal Infringement

If a person makes, uses, offers to sell, or sells in the United States or imports into the United States what is covered by the claims of a patent without the patent owner's permission, that person is said to literally infringe the patent. To determine literal infringement, you must independently compare each of the accused features with the Asserted Claims, using my instructions as to the meaning of those patent claims.

A patent claim is literally infringed only if an accused feature, product, system, or method includes each and every element in that patent claim. If the accused feature, product, system, or method does not contain one or more of the elements recited in a claim, then that feature, product, system, or method does not literally infringe that claim. If you find that the accused product or method includes each element of the claim, then that product or method infringes the claim even if such product or method contains additional elements that are not recited in the claims.

If you find that the accused feature, product, system, or method includes each element of the claim, then that feature, product, system, or method infringes the claim, even if such feature, product, system, or method contains additional elements that are not recited in the claims.

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A person may literally infringe a patent, even though in good faith the person believes that what it is doing is not an infringement of any patent, and even if it did not know of the patent. Literal infringement does not require proof that the person copied a product or the patent. You must consider each of the Asserted Claims individually. You must be certain to compare each accused feature, product, or system with each claim such feature, product, or system is alleged to infringe. Each accused feature, product, or system should be compared to the limitations recited in the Asserted Claims, not to any preferred or commercial embodiment of the claimed invention.

You must analyze each Asserted Claim and each accused feature separately. If you find that VirnetX has proved by a preponderance of the evidence that each and every limitation of that claim is present in the accused feature, method, or system, then you must find that such feature, method, or system infringes that claim.

5.3 Indirect Infringement

VirnetX alleges that Apple is also liable for indirect infringement by actively inducing others to directly infringe the Asserted Claims. As with direct infringement, you must determine whether there has been indirect infringement by active inducement on a claim-by-claim and feature-by-feature basis.

Although VirnetX need not prove that Apple has directly infringed to prove indirect infringement, VirnetX must prove that someone has directly infringed. If

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there is no direct infringement by anyone, Apple cannot have actively induced the infringement of the patent.

To show active inducement of infringement, VirnetX must prove by a preponderance of the evidence that Apple's customers or end-users have directly infringed the asserted claims of the patents-in-suit, and that Apple has actively and knowingly aided and abetted that direct infringement.

Apple is liable for active inducement of a claim only if:

(1)   Apple has taken action during the time the patent is in force which encourages acts by someone else;

(2)   the encouraged acts constitute direct infringement of that claim;

(3)   Apple

- is aware of the patent and knows that the encouraged acts constitute infringement of the patent, or;

- is willfully blind to the infringement of the patent. Willful blindness requires that Apple subjectively believed that there was a high probability that the encouraged acts constituted infringement of the patent and Apple took deliberate actions to avoid learning of the infringement.

(4) Apple has the intent to encourage infringement by someone else; and

(5) The encouraged acts are actually carried out by someone else.

In order to prove active inducement, VirnetX must prove that each of the above requirements is met by a preponderance of the evidence. That is, that it is more likely true than not that each of the above requirements has been met. If you find that Apple was aware of the patent but believed that the acts it encouraged did not infringe that patent, Apple cannot be liable for active inducement of infringement. In order to establish active inducement of infringement, it is not sufficient that Apple was aware of the acts that allegedly constituted the direct infringement. Rather, you must find that Apple specifically intended to cause the acts that constitute the direct infringement and must have known or was willfully blind that the action would cause direct infringement. If you do not find that Apple meets these specific intent requirements by a preponderance of the evidence, then you must find that Apple has not actively induced the alleged infringement.

6. Damages – Generally

I will now instruct you on damages. If you find that Apple has infringed any claim of VirnetX's patents-in-suit, you must determine the amount of damages to which VirnetX is entitled.

The amount of damages must be adequate to compensate VirnetX for the infringement. At the same time, your damages determination must not include additional sums to punish Apple or to set an example. You may award compensatory

damages only for the loss that VirnetX proves was more likely than not caused by Apple's infringement.

VirnetX seeks damages in the form of a reasonable royalty. Generally, a reasonable royalty is the reasonable amount that someone wanting to use the patented invention should expect to pay to the patent owner and the patent owner should expect to receive.

6.1 Damages- Burden of Proof

Where the parties dispute a matter concerning damages, it is VirnetX's burden to prove the amount of damages by a preponderance of the evidence. VirnetX must prove the amount of damages with reasonable certainty but need not prove the amount of damages with mathematical precision. However, VirnetX is not entitled to damages that are remote or speculative. In other words, you should award only those damages that VirnetX establishes that it more likely than not suffered.

6.2 Damages – Reasonable Royalty

A reasonable royalty is the amount of money a willing patent owner and a willing prospective licensee would have agreed upon at the time the infringement began for a license to make, use, or sell the invention. It is the royalty that would have resulted from an arm's length negotiation between a willing licensor and a willing licensee. This is known as the hypothetical negotiation. Unlike in a real world negotiation, all parties to the hypothetical negotiation are presumed to believe

that the patent is infringed and valid. In considering this hypothetical negotiation, you should focus on what the expectations of patent owner and the infringer would have been had they entered into an agreement at that time and had they acted reasonably in their negotiations.

If infringement is found, the date of the hypothetical negotiation would be September 2013, when the redesigned versions of VPN on Demand and FaceTime were released. The parties agree that if infringement is found, damages would begin on September 18, 2013.

In making your determination of the amount of a reasonable royalty, it is important that you focus on the time period when Apple first infringed that patent and the facts that existed at that time. However, evidence of things that happened after the infringement first began may be considered in evaluating the reasonable royalty only to the extent that the evidence aids in assessing what royalty would have resulted from a hypothetical negotiation.

Your determination does not depend on the actual willingness of the parties to the lawsuit to engage in such negotiations in the real world. Your focus should be on what the parties' expectations would have been had they entered into negotiations for royalties at the time of the hypothetical negotiation.

6.2 Reasonable Royalty Factors

In deciding what is a reasonable royalty that would have resulted from the hypothetical negotiation, you may consider the factors that the patent owner and the alleged infringer would consider in setting the amount the alleged infringer should pay. I will list for you a number of factors you may consider. This is not every possible factor, but it will give you an idea of the kinds of things to consider in setting a reasonable royalty. They are as follows:

- The royalties received by the patentee for licensing of the patents-in-suit, proving or tending to prove an established royalty.

- Royalties paid for other patents comparable to the patents-in-suit.

- The nature and scope of the license, as exclusive or non-exclusive; or as restricted or non-restricted in terms of territory, or with respect to the parties to whom products may be sold.

- Whether or not the licensor had an established policy and marketing program to maintain its patent exclusivity by not licensing others to use the invention or by granting licenses under special conditions designed to preserve that exclusivity.

- The commercial relationship between the licensor and the licensee, such as whether they are competitors in the same territory, in the same line of business, or whether they are inventor and promoter.

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- Whether being able to use the patented invention helps in making sales of other products or services.

- The duration of the patent and the term of the license.

- The utility and advantages of the patented invention over the old modes or devices, if any, that had been used for achieving similar results.

- The nature of the patented invention, the character of the commercial embodiment of it as owned and produced by the licensor, and the benefits to those who have used the invention.

- The extent of the licensee's use of the patented invention and any evidence probative of that use.

- The portion of the profits that is due to the patented invention as compared to the portion of the profit due to other factors, such as unpatented elements or unpatented manufacturing processes, or features or improvements developed by the licensee.

- Expert opinions as to what would be a reasonable royalty.

- The amount that a licensor and a licensee would have agreed upon if both sides had been reasonably and voluntarily trying to reach an agreement; that is, the amount which an accused infringer would have been willing to pay as a royalty and yet be able to make a reasonable profit and which amount would

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have been acceptable to the patent owner if it had been willing to create a license.

No one factor is dispositive and you can and should consider the evidence that has been presented to you in this case on each of these factors. In determining a reasonable royalty, you may also consider evidence concerning the availability and cost of non-infringing alternatives to the patented invention. A non-infringing alternative must be an acceptable product that is licensed under the patent or that does not infringe the patent. The framework which you should use in determining a reasonable royalty is a hypothetical negotiation between normally prudent business people. In considering the evidence of a reasonable royalty, you're not required to accept one specific figure or another for the reasonable royalty. You are entitled to determine what you consider to be a reasonable royalty based upon your consideration of all of the evidence presented by the parties, whether that evidence is of a specific figure or a range of figures.

When determining a reasonable royalty, you may consider evidence concerning the amounts that other parties have paid for rights to the patents in question or for rights to similar technologies. A license agreement need not be perfectly comparable to a hypothetical license that would have been negotiated between VirnetX and Apple in order for you to consider it. However, if you choose to rely upon evidence from any license agreements, you must account for any

differences between those licenses and the hypothetically negotiated license between VirnetX and Apple when you make your reasonable royalty determination, including the type of technology licensed, whether the license contained a cross-license and/or similar patent protections, whether the license contained any value related to a release of liability, the date when the license was entered, the financial or economic conditions of the parties at the time the parties entered into the license, the extent of use, if any, of any particular licensed patents, the number of patents involved in the license, whether or not the license covered foreign intellectual property rights, the extent to which litigation may have affected the license, and whether contrary to the hypothetical negotiation the licensee in the real world license, at the time of entering the license, believed that the patents were either not infringed or were invalid.

VirnetX has relied on license agreements in which royalties were based on a percentage of the entire price of the licensed end-products. But in determining a reasonable royalty, you must not rely on the overall price of Apple's accused products at issue in this case. Damages for patent infringement must be apportioned to reflect the value the invention contributes to the accused products or features and must not include value from the accused products or features that is not attributable to the patent.

7.   **Instructions for Deliberations**

You must perform your duties as jurors without bias or prejudice as to any party. The law does not permit you to be controlled by sympathy, prejudice, or public opinion. All parties expect that you will carefully and impartially consider all of the evidence, follow the law as it is now being given to you, and reach a just verdict, regardless of the consequences. You should consider and decide this case as a dispute between persons of equal standing in the community, of equal worth, and holding the same or similar stations in life. All persons, including corporations, and other organizations stand equal before the law, regardless of size or who owns them, and are to be treated as equals.

When you retire to the jury room to deliberate on your verdict, you may take this charge with you, as well as the exhibits which the Court has admitted into evidence. You will select your foreperson and conduct your deliberations. If you recess during your deliberations, please follow all of the instructions that the Court has given you about your conduct during the trial.

After you have reached your verdict, your foreperson is to fill in on the form your answers to the questions. Do not reveal your answers until such time as you are discharged, unless otherwise directed by me.

Any notes that you may have taken during the trial, of course as we discuss at the beginning, are only aids to your memory. If your memory should differ from

your notes, then you should rely on your memory and not on the notes. Your notes are not evidence. A juror who has not taken notes should rely on his or her independent recollection of the evidence and should not be unduly influenced by the notes of other jurors. Notes are not entitled to any greater weight than the recollection or impression of each juror about the testimony.

If you want to communicate with me at any time during your deliberations, please give a written message or a question to the Court Security Officer, and we will provide you with sheets on which to do that, and she will bring it to me. I will then respond as promptly as possible, either in writing or by having you brought into the courtroom so that I can address you orally. I will always first disclose to the attorneys your question and my response before I answer your question.

And then finally, after you have reached a verdict, you are not required to talk with anyone about the case unless the Court orders otherwise.

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

VIRNETX INC.,	§	
	§	
Plaintiff,	§	CIVIL ACTION NO. 6:12-CV-00855-
	§	RWS
v.	§	
	§	
APPLE INC.,	§	
	§	
Defendant.	§	
	§	

VERDICT FORM

In answering these questions, you are to follow all of the instructions provided by the Court during the Court's jury instructions. Your answers to each question must be unanimous.

As used herein, "'135 patent" means U.S. Patent No. 6,502,135; "'151 patent" means U.S. Patent No. 7,490,151; "'504 patent" means U.S. Patent No. 7,418,504; "'211 patent" means U.S. Patent No. 7,921,211.

1. Did VirnetX prove by a preponderance of the evidence that Apple's redesigned version of its VPN on Demand feature infringes the following claims of VirnetX's '135 & '151 patents?

    Answer "Yes" or "No" for each Claim.

    '135 Patent   '151 Patent

    Claim 1   YES   Claim 13   YES
    Claim 7   YES

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2. Did VirnetX prove by a preponderance of the evidence that Apple's redesigned version of the FaceTime feature infringes the following claims of VirnetX's '504 & '211 patents?

Answer "Yes" or "No" for each Claim.

'504 Patent   '211 Patent

Claim 1   YES   Claim 36   YES
Claim 2   YES   Claim 47   YES
Claim 5   YES   Claim 51   YES
Claim 27   YES

Answer Question 3 only if you answered "yes" for any of Questions 1 or 2 above. Otherwise, do not answer this question.

3. What royalty do you find, by a preponderance of the evidence, would fairly and reasonably compensate VirnetX for any infringement that you have found?

$502,567,709.00

You have now reached the end of the verdict form and should review it to ensure it accurately reflects your unanimous determinations. The jury foreperson should then sign and date the verdict form in the spaces below and notify the Court Security Officer that you have reached a verdict. The jury foreperson should retain possession of the verdict form and bring it when the jury is brought back into the courtroom.

Date: 1⊅ APR 2⊅18   By: ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮
                                JURY FOREPERSON

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

VIRNETX INC.,	§	
	§	
Plaintiff,	§	CIVIL ACTION NO. 6:12-CV-00855-
	§	RWS
v.	§	
	§	
APPLE INC.,	§	
	§	
Defendant.	§	
	§	

JURY INSTRUCTIONS

1.   **Introduction**

MEMBERS OF THE JURY:

You have now heard the evidence in this case, and I will instruct you now on

the law that you must apply. It is your duty to follow the law as I give it to you. On

the other hand, you, the jury, are the sole judges of the facts. Again, do not consider

any statement that I may have made during the trial or make in these instructions as

an indication that I have any opinion about the facts of the case. After I instruct you

on the law, as I suggested, the attorneys will have an opportunity to make their

closing arguments. Statements and argument of the attorneys are not evidence and

are not instructions on the law. They are intended only to assist you in understanding

the evidence and what the parties' contentions are.

1.1 General Instruction

Another verdict form has been prepared for you, and you will take this form with you to the jury room. And again, when you have reached a unanimous agreement as to your verdict, you will have your foreperson fill in, date, and sign the form. At the end of the instructions, I will take you through the verdict form before the parties begin their closing arguments. Answer each question on the verdict form from the facts as you find them. Again, do not decide who you think should win and then answer the questions accordingly. A corporation and all other persons are equal before the law and must be treated as equals in a court of justice. With respect to each question asked, your answers and your verdict must be unanimous.

In determining whether any fact has been proven in this case, you may, unless otherwise instructed, consider the testimony of all witnesses regardless of who may have called them and all exhibits received in evidence regardless of who may have produced them. At times during the trial, it was necessary for the Court to talk with the lawyers here at the bench out of your hearing or by calling a recess. We met at the bench or when you were in the jury room because during trial, sometimes things come up that don't involve the jury. You should not speculate on what was discussed during such times. You are the jurors, and you are the sole judges of the credibility of all the witnesses and the weight and effect of all evidence. By the Court allowing

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testimony or other evidence to be introduced over the objection of an attorney, the Court did not indicate any opinion as to the weight or effect of such evidence.

1.2 Considering Witness Testimony

You alone are to determine the questions of credibility or truthfulness of the witnesses. In weighing the testimony of the witnesses, you may consider the witness's manner and demeanor on the witness stand, any feelings or interest in the case, or any prejudice or bias about the case, that he or she may have, and the consistency or inconsistency of his or her testimony considered in the light of the circumstances. Has the witness been contradicted by other credible evidence? Has he or she made statements at other times and places contrary to those made here on the witness stand? You must give the testimony of each witness the credibility that you think it deserves.

Even though a witness may be a party to the action and therefore interested in its outcome, the testimony may be accepted if it is not contradicted by direct evidence or by any inference that may be drawn from the evidence, if you believe the testimony.

You are not to decide this case by counting the number of witnesses who have testified on the opposing sides. Witness testimony is weighed; witnesses are not counted. The test is not the relative number of witnesses, but the relative convincing force of the evidence. The testimony of a single witness is sufficient to prove any

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fact, even if a greater number of witnesses testified to the contrary, if after considering all of the other evidence, you believe that witness.

1.3   Impeachment by Witness's Inconsistent Statements

In determining the weight to give to the testimony of a witness, consider whether there was evidence that at some other time the witness said or did something, or failed to say or do something, that was different from the testimony given at the trial.

A simple mistake by a witness does not necessarily mean that the witness did not tell the truth as he or she remembers it. People may forget some things or remember other things inaccurately. If a witness made a misstatement, consider whether that misstatement was an intentional falsehood or simply an innocent mistake. The significance of that may depend on whether it has to do with an important fact or with only an unimportant detail.

1.4   How to Examine the Evidence

Certain testimony in this case has been presented to you through a deposition. A deposition is the sworn, recorded answers to questions asked to a witness in advance of the trial. Under some circumstances, if a witness cannot be present to testify from the witness stand, the witness testimony may be presented under oath in the form of a deposition. Sometime before this trial, attorneys representing the parties in this case questioned this witness under oath. A court reporter was present

and recorded the testimony. This deposition testimony is entitled to the same consideration and is to be judged by you as to the credibility and weight and otherwise considered by you insofar as possible the same as if the witness had been present and had testified from the witness stand in court.

While you should consider only the evidence in this case, you are permitted to draw such reasonable inferences from the testimony and exhibits as you feel are justified in the light of common experience. In other words, you may make deductions and reach conclusions that reason and common sense lead you to draw from the facts that have been established by the testimony and evidence in the case. The testimony of a single witness may be sufficient to prove any fact, even if a greater number of witnesses may have testified to the contrary, if after considering all the other evidence you believe that single witness.

Again, there are two types of evidence that you may consider in properly finding the truth as to the facts in this case. One is direct evidence, such as testimony of an eyewitness. The other is indirect or circumstantial evidence, the proof of a chain of circumstances that indicates the existence or non-existence of certain other facts. As a general rule, the law makes no distinction between direct and circumstantial evidence, but simply requires that you find the facts from all of the evidence, both direct and circumstantial.

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The parties have stipulated, or agreed, to some facts in this case. When the lawyers on both sides stipulate to the existence of a fact, you must, unless otherwise instructed, accept the stipulation as evidence and regard the fact as proved.

1.5 Objections to Evidence

Attorneys representing clients in courts such as this one have an obligation in the course of trial to assert objections when they believe testimony or evidence is being offered that is contrary to the rules of evidence. The essence of a fair trial is that it be conducted pursuant to the rules of evidence and that your verdict be based only on legally admissible evidence. So you should not be influenced by the objection or by the Court's ruling on it. If the objection is sustained, then ignore the question. If the objection is overruled, then you may treat the answer to that question just as you would treat the answer to any other question.

1.6 Expert Witnesses

When knowledge of a technical subject matter may be helpful to the jury, a person who has special training or experience in that technical field, he or she is called an expert witness, is permitted to state his or her opinion on those technical matters. However, you are not required to accept that opinion. As with any other witness, it is up to you to decide whether the witness's testimony is believable or not, whether it is supported by the evidence, and whether to rely upon it. In deciding

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whether to accept or rely upon the opinion of an expert witness, you may consider any bias of the witness.

2.   Contentions of the Parties

I will first give you a summary of each side's contentions in this case. I will then tell you what each side must prove to win on these issues.

At the trial that concluded on Tuesday, you all determined that the redesigned VPN on Demand feature that was released in September 2013 infringed claims 1 and 7 of the '135 patent and claim 13 of the '151 patent. You also determined that the redesigned FaceTime feature that was released in September 2013 infringed claims 1, 2, 5, and 27 of the '504 patent and claims 36, 47, and 51 of the '211 patent.

VirnetX contends that this infringement was willful. Apple contends that infringement was not willful.

3.   Burdens of Proof

As I told you at the beginning of this trial, in any legal action, facts must be proved by a required amount of evidence known as the "burden of proof." The burden of proof in this case is on VirnetX. VirnetX has the burden of proving willful infringement by a preponderance of the evidence. Preponderance of the evidence means the evidence that persuades you that a claim is more likely true than not true. If the proof establishes that all parts of one of VirnetX's willful infringement claims are more likely true than not true, then you should find for VirnetX as to that claim.

But if you find that VirnetX has failed to prove any part of its claim by a preponderance of the evidence, then VirnetX may not recover on its claim. In determining whether any fact has been proved by a preponderance of the evidence, you may, unless otherwise instructed, consider the stipulations, the testimony of all witnesses, regardless of who may have called them, and all exhibits received in evidence, regardless of who may have produced them. In connection with this phase, you may consider evidence from both the first phase and this one, regardless of whether evidence is repeated in this phase of the case.

4.   Willful Infringement

In this phase of the case, VirnetX contends that Apple willfully infringed the patents-in-suit. Willfulness requires you to determine whether VirnetX proved that it is more likely than not that the infringement by Apple was especially worthy of punishment. You may not determine that the infringement was willful just because Apple knew of a patent and infringed it. Instead, willful infringement is reserved for only the most egregious behavior, such as where the infringement is malicious, deliberate, consciously wrongful, or done in bad faith. You must base your decision on Apple's knowledge at the time of infringement.

To determine whether Apple acted willfully for any of the patents-in-suit, consider all facts. These may include, but are not limited, to:

(1) Whether or not Apple acted consistently with the standards of behavior for its industry;

(2) Whether or not Apple intentionally copied a product of VirnetX that is covered by a patent-in-suit;

(3) Whether or not Apple reasonably believed it did not infringe;

(4) Whether or not Apple made a good-faith effort to avoid infringing, for example, whether Apple attempted to design around the patent;

(5) Whether or not Apple tried to cover up its infringement; and

(6) Whether Apple's reliance on an opinion of counsel as a defense to VirnetX's allegations of willful infringement was reasonable.

Your determination of willfulness should incorporate the totality of the circumstances based on the evidence presented during this trial.

5.   Instructions for Deliberations

Again, you must perform your duties as jurors without bias or prejudice as to any party. The law does not permit you to be controlled by sympathy, prejudice, or public opinion. All parties expect that you will carefully and impartially consider all of the evidence, follow the law as it is now being given to you, and reach a just verdict, regardless of the consequences. You should consider and decide this case as a dispute between persons of equal standing in the community, of equal worth, and holding the same or similar stations in life. All persons, including corporations, and

other organizations stand equal before the law, regardless of size or who owns them, and are to be treated as equals.

When you retire to the jury room to deliberate on your verdict, you may take this charge with you, as well as the exhibits which the Court has admitted into evidence. You will select your foreperson and conduct your deliberations. If you recess during your deliberations, please follow all of the instructions that the Court has given you about your conduct during the trial.

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As before, if you want to communicate with me at any time during your deliberations, please give a written message or a question to the Court Security Officer, and we will provide you with sheets on which to do that, and he will bring

it to me. I will then respond as promptly as possible, either in writing or by having you brought into the courtroom so that I can address you orally. I will always first disclose to the attorneys your question and my response before I answer your question.

And then finally, after you have reached a verdict, you are not required to talk with anyone about the case unless the Court orders otherwise.

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

VIRNETX INC.,	§	
	§	
Plaintiff,	§	CIVIL ACTION NO. 6:12-CV-00855-
	§	RWS
v.	§	
	§	
APPLE INC.,	§	
	§	
Defendant.	§	
	§	

VERDICT FORM

In answering these questions, you are to follow all of the instructions provided by the Court during the Court's jury instructions. Your answers to each question must be unanimous.

As used herein, "'135 patent" means U.S. Patent No. 6,502,135; "'151 patent" means U.S. Patent No. 7,490,151; "'504 patent" means U.S. Patent No. 7,418,504; and "'211 patent" means U.S. Patent No. 7,921,211.

1.   With respect to the redesigned VPN on Demand feature that was released in September 2013, did VirnetX prove by a preponderance of the evidence that Apple willfully infringed any of the following claims?

Answer "Yes" or "No" for each Claim.

'135 Patent   '151 Patent

Claim 1 YES   Claim 13 YES
Claim 7 YES

CONTINUE ON TO NEXT PAGE

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2.   With respect to the redesigned FaceTime feature that was released in September 2013, did VirnetX prove by a preponderance of the evidence that Apple willfully infringed any of the following claims?

Answer "Yes" or "No" for each Claim.

'504 Patent   '211 Patent

Claim 1 __YES__   Claim 36 __YES__
Claim 2 __YES__   Claim 47 __YES__
Claim 5 __YES__   Claim 51 __YES__
Claim 27 __YES__

You have now reached the end of the verdict form and should review it to ensure it accurately reflects your unanimous determinations. The jury foreperson should then sign and date the verdict form in the spaces below and notify the Court Security Officer that you have reached a verdict. The jury foreperson should retain possession of the verdict form and bring it when the jury is brought back into the courtroom.

Date: __11 APR 2018__   By: ████████████████

                                         JURY FOREPERSON

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

VIRNETX INC., LEIDOS, INC.,	§	
	§	
	§	CIVIL ACTION NO. 6:12-CV-00855-RWS
Plaintiffs,	§	
	§	
v.	§	
	§	
APPLE INC.,	§	
	§	
	§	
Defendant.	§	

MEMORANDUM OPINION AND ORDER

Plaintiff VirnetX, Inc. ("VirnetX") and Defendant Apple Inc.'s ("Apple") dispute spans over eight years in this Court. An overview of the lengthy history of the dispute provides helpful context for the Court's opinion below.

On August 11, 2010, VirnetX filed Case No. 6:10-cv-417 against Apple alleging infringement of U.S. Patent Nos. 6,502,135 ("the '135 Patent"), 7,418,504 ("the '504 Patent"), 7,490,151 ("the '151 Patent") and 7,921,211 ("the '211 Patent"). Case No. 6:10-cv-417 ("417 action"), Docket No. 1. On November 6, 2012, a jury found that the first versions of Apple's accused VPN On Demand and FaceTime features infringed the asserted patents and that the asserted patents were not invalid. 417 action, Docket No. 790. On the same day, VirnetX filed the instant case, Case No. 6:12-cv-855, accusing of infringement several redesigned products. Docket No. 1.

In the 417 action, Apple and VirnetX both filed post-trial motions, which the Court resolved in a memorandum opinion. 417 action, Docket No. 851. The matter was appealed, and the Federal Circuit affirmed-in-part, reversed-in-part and remanded for further proceedings. 417

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action, Docket No. 853; *see VirnetX, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1313–14 (Fed. Cir. 2014).

The Federal Circuit affirmed the jury's finding of infringement by VPN On Demand and affirmed the Court's denial of Apple's motion for judgment as a matter of law on invalidity. *Id*. The Federal Circuit vacated the infringement finding for FaceTime based upon a change in claim construction, holding that the term "secure communication link" requires both "security and anonymity," and vacated damages for VPN On Demand and FaceTime because it found that the jury relied on a flawed damages model. *Id.* at 1314.

Upon receipt of the Federal Circuit's mandate, the Court solicited the parties' proposals on how to proceed. 417 action, Docket No. 855. The parties submitted a status report in which VirnetX proposed the Court consolidate the remaining issues in the 417 action with the upcoming trial in the 855 action. Docket No. 864 at 4. Apple opposed the consolidation. *See* 417 action, Docket No. 873 at 45:20–46:6. After a status conference on March 10, 2015, the Court consolidated the 855 and 417 actions, designating the 855 action as the lead case with a revised schedule. Docket No. 220. After extensive motion practice (*see* Docket Nos. 315, 317–323, 326; *see also* Docket Nos. 362, 468), the consolidated action was tried to a jury, and the jury returned a verdict finding infringement of the '135, '151, '504 and '211 patents.

Again, both Apple and VirnetX filed post-trial motions (Docket Nos. 462, 463), and on July 29, 2016, the Court granted Apple's Motion for a New Trial Based Upon the Consolidation of Cause Nos. 6:10-cv-417 and 6:12-cv-855. Docket No. 500. The Court reasoned that the consolidation and repeated discussion of the previous jury verdict resulted in an unfair trial. Docket No. 500 at 14. In its Order, the Court explained that "Cause No. 6:10-cv-417 will be retried with jury selection to begin on September 26, 2016, unless the parties agree otherwise on an

alternative date, and immediately followed by a second trial on the issue of willfulness. Cause No. 6:12-cv-855 will be retried after Cause No. 6:10-cv-417." *Id*. at 15.

After another round of extensive motion practice (*see, e.g.*, 417 action, Docket Nos. 930–931, 937, 944–945), the 417 action was again tried to a jury. The jury found that FaceTime infringed the '211 and '504 patents and awarded approximately $302 million in damages for the collective infringement by the VPN On Demand and FaceTime features in the accused Apple products. 417 action, Docket No. 1025. After the September trial, both parties submitted post-trial motions (*see* 417 action, Docket Nos. 1018–1019, 1047, 1062–1063), which the Court resolved in a memorandum opinion (Docket No. 1079). Apple's appeal of the 417 action final judgment is pending before the Federal Circuit. *See* 417 case, Docket Nos. 1079, 1089, 1091.

While the post-trial motions were pending, on February 9, 2017, the Court requested that the parties meet and confer about the timing of the 855 trial and propose a schedule. The parties each filed a response (Docket Nos. 519, 520), and Apple simultaneously filed a motion to stay (Docket No. 518). The Court denied Apple's motion (Docket Nos. 527, 553) and set the case on a schedule (Docket No. 539).

The Court held a jury trial in this matter from April 2, 2018 through April 11, 2018. The trial was bifurcated into (1) a liability and damages phase and (2) a willfulness phase—which were tried in succession to one jury. After the liability and damages phase, the jury returned a verdict finding both VPN on Demand and FaceTime to infringe each asserted patent and awarding $502,567,709 in damages. Docket No. 723. After the willfulness phase, the jury returned a verdict that Apple's infringement was willful. Docket No. 729.

Following the verdict, Apple filed its Omnibus Motion for Judgment as a Matter of Law under Rule 50(b) and for a New Trial (Docket No. 775), and VirnetX filed its Motion for Entry of

Judgment and Equitable and Statutory Relief (Docket No. 774). The Court heard argument on the motions on July 18, 2018. The Court now resolves the parties' motions below.

LEGAL STANDARD

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). "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. DirecTV Group, Inc.*, 523 F.3d 1323, 1332 (Fed. Cir. 2008).

Under Fifth Circuit law, a court is to be "especially deferential" to a jury's verdict and must not reverse the jury's findings unless they are not supported by substantial evidence. *Baisden v. I'm Ready Prods., Inc.*, 693 F.3d 491, 499 (5th Cir. 2012). "Substantial evidence is defined as evidence of such quality and weight that reasonable and fair-minded men in the exercise of impartial judgment might reach different conclusions." *Threlkeld v. Total Petroleum, Inc.*, 211 F.3d 887, 891 (5th Cir. 2000). The Court will "uphold a jury verdict unless the facts and inferences point so strongly and so overwhelmingly in favor of one party that reasonable men could not arrive at any verdict to the contrary." *Cousin v. Trans Union Corp.*, 246 F.3d 359, 366 (5th Cir. 2001); *see also Int'l Ins. Co. v. RSR Corp.*, 426 F.3d 281, 296 (5th Cir. 2005). However, "[t]here must be more than a mere scintilla of evidence in the record to prevent judgment as a matter of law in favor of the movant." *Arismendez v. Nightingale Home Health Care, Inc.*, 493 F.3d 602, 606 (5th Cir. 2007) (citing *Laxton v. Gap, Inc.*, 333 F.3d 572, 577 (5th Cir. 2003)).

In evaluating a motion for judgment as a matter of law, the court must "draw all reasonable inferences in the light most favorable to the verdict and cannot substitute other inferences that [the

court] might regard as more reasonable." *E.E.O.C. v. Boh Bros. Const. Co., L.L.C.*, 731 F.3d 444, 451 (5th Cir. 2013). Although the court must review the record as a whole, it must disregard all evidence favorable to the moving party that the jury is not required to believe. *Ellis v. Weasler Eng'g Inc.*, 258 F.3d 326, 337 (5th Cir. 2001). However, a court may not make credibility determinations or weigh the evidence, as those are solely functions of the jury. *See id.* (citing *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 150–51 (2000)). The Court gives "credence to evidence supporting the moving party that is uncontradicted and unimpeached if that evidence comes from disinterested witnesses." *Arismendez*, 493 F.3d at 606.

Under Federal Rule of Civil Procedure 59(a), a new trial may be granted 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." Rule 59(a)(1)(A). The Federal Circuit reviews the question of a new trial under the law of the regional circuit. *Z4 Techs., Inc. v. Microsoft Corp.*, 507 F.3d 1340, 1347 (Fed. Cir. 2007). The court can grant a new trial "based on its appraisal of the fairness of the trial and the reliability of the jury's verdict." *Smith v. Transworld Drilling Co.*, 773 F.2d 610, 612–13 (5th Cir. 1985). "Courts grant a new trial when it is reasonably clear that prejudicial error has crept into the record or that substantial justice has not been done, and the burden of showing harmful error rests on the party seeking the new trial." *Sibley v. Lemaire*, 184 F.3d 481, 487 (5th Cir. 1999) (quoting *Del Rio Distributing, Inc. v. Adolph Coors Co.*, 589 F.2d 176, 179 n. 3 (5th Cir. 1979)). "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*, 773 F.2d at 612–13. The decision to grant or deny a new trial is committed to the sound discretion of the district court. *See Allied Chem. Corp. v. Daiflon, Inc.*, 449 U.S. 33, 36 (1980). "[N]ew trials should not be granted on evidentiary grounds unless, at a

minimum, the verdict is against the great[,] not merely the greater weight of the evidence."

Conway v. Chem. Leaman Tank Lines, Inc., 610 F.2d 360, 363 (5th Cir. 1980).

I. APPLE'S OMNIBUS MOTION FOR JUDGMENT AS A MATTER OF LAW UNDER RULE 50(B) AND FOR A NEW TRIAL (DOCKET NO. 775)

A. Apple's Motion for Judgment as a Matter of Law and New Trial on Infringement

(1) *FaceTime*

A short overview of the accused FaceTime products in this case is instructive. There are three versions of FaceTime that the Court discusses below. The "first version" was the product at issue in the 417 action, which the 417 jury found to infringe the asserted claims. A "second version" was implemented in April of 2013 and relayed 100 percent of calls. *See, e.g.*, 4/3 PM Tr. at 165:15–19. The parties agree that the "second version" does not infringe VirnetX's patents. *Id*. And finally, at issue in this case is a "third version" of FaceTime, which was released in September 2013 via a software update. *Id*. at 165:20–22; Docket No. 775 at 2–3. At trial, the design and operation of this third product was disputed, and the jury determined that the third version infringed each of the asserted claims. Docket No. 723.

a.   Indication

VirnetX accuses the third version of FaceTime of infringing claims 1, 2, 5 and 27 of the '504 patent and claims 36, 47 and 51 of the '211 patent. Each asserted claim of the '504 and '211 patents requires a "domain name service system" that is configured "to comprise an indication," in the case of the '504 patent, or "to indicate," in the case of the '211 patent, that "the domain name service system supports establishing a secure communication link." The term "secure communication link" requires "a direct communication link that provides data security and anonymity." Docket No. 262; *see also VirnetX*, 767 F.3d at 1317–19. The Court's construction of "indication" is "an indication other than merely returning of requested DNS records, such as an

IP address or key certificate, that the domain name service system supports establishing a secure communication link." Docket No. 180 at 10.

According to Apple, VirnetX's expert, Dr. Mark Jones, opined that the claimed "domain name service system" was met by Apple's FaceTime invitation server, push notification servers and registration database. Docket No. 775 at 1. Specifically, Apple suggests that Dr. Jones identified the "accept push" message as meeting the indication requirement. *Id*. at 1–2. Apple disagrees with Dr. Jones's assessment because, in the version of FaceTime at issue in this case, the callee's IP address was removed from the accept push message. *Id*. at 2. Apple maintains that "this change alone had the effect of directing all FaceTime calls through a relay server, an *indirect* connection that the parties agree does not infringe." *Id*. (emphasis in original). Apple submits that, although FaceTime clients could establish peer-to-peer connections after September 2013, this was the result of a client-side software change, not a server change, so Apple does not infringe. *Id*. at 3.

In response, VirnetX identifies the following trial testimony from Dr. Jones about indication:

> Q. And how does that accept push message indicate that the FaceTime domain name service system supports establishing a secured communication link?
>
> A. Well, that accept push message is the culmination of this provisioning process that I described. And that provisioning process includes authenticating the identities of both of the parties and their phones. It includes providing them and -- the certificates for each one of the parties. There are, as I discussed, certificate names, a session token. And then coming back in that accept push message are things like the callee's certificate, a push token, a certificate name for the callee, and other information.

Docket No. 779 at 2 (citing 4/3 PM Tr. at 121:5–16. According to VirnetX, the accept push message is an indication that the FaceTime servers have successfully authenticated and

provisioned devices to establish a FaceTime call. *Id.* VirnetX also points to Dr. Jones's testimony that, under the Court's construction, the FaceTime servers are not merely returning requested DNS records such as IP addresses or certificates and that the FaceTime servers support establishing direct, secure FaceTime calls. *Id.* (citing 4/3 PM Tr. at 122:16–123:17; 123:18–124:4). Aside from expert evidence, VirnetX also identifies the testimony of Mr. Gokul Thirumalai, an Apple corporate representative, who testified at trial that he made a server-side change in May of 2013 to facilitate direct peer-to-peer calls. *Id.* (citing 4/5 PM Tr. at 247:22–248:1).

In its reply, Apple reiterates its belief that the indication necessarily must include the callee's IP address because the address is necessary for the caller to make a direct call. Docket No. 783 at 1. Apple also suggests that the Court's construction requires that the "indication do something *more* than 'merely' return an IP address—not that it *cannot* return an IP address." *Id.* at 2 (emphasis in original).

To put the parties' arguments in context, a review of the claim construction is instructive. The Court construed the "indication" term in the context of the '504 patent. At Markman, Apple proposed that an "an indication that the domain name service system supports establishing a secure communication link" be construed to mean "an affirmative signal beyond the mere returning of an IP address, public key, digital signature, or certificate that the domain name service system supports establishing a secure communication link." Docket No. 180 at 8–9.

The Court found that Apple's proposed construction was more correct in light of statements made by the patentees during reexamination. Specifically, the Court explained that the patentees represented to the examiner that "[t]he '504 patent specification clearly and unequivocally disclaims merely returning an address or a public key by describing these actions as 'conventional' in the prior art, and that "[n]ever does the specification equate the mere return of requested DNS

records, such as an IP address or key certificate, with supporting secure communications." *Id*. at

10 (citing Docket No. 150-14 at 5–6). These statements were found to clearly distinguish the mere

return of requested DNS records, such as an IP address or key certificate, from the claimed

"indication" terms. *Id*. The Court ultimately construed "an indication that the domain name

service system supports establishing a secure communication link" as "an indication other than

merely returning of requested DNS records, such as an IP address or key certificate, that the

domain name service system supports establishing a secure communication link." *Id*.

The Court's construction requires an indication *other than* the mere return of an IP address,

so return of an IP address is not required, and VirnetX was not required to point to the return of an

IP address to establish infringement at trial. Apple posits that an IP address is nonetheless

necessary for a caller to make a direct call and that the claims require indicating support for a direct

link. Docket No. 783 at 1. But VirnetX presented credible evidence at trial that IP addresses from

both the caller and callee are *not* necessary to set up a direct call. *See* 4/4 AM Tr. (Jones) at 29:17–

30:1 ("Q. And I think that the suggestion was that there were two that -- that setting up a direct

connection requires two IP addresses. Is that your impression? A. That's what I understand the

point to be. Q. All right. Dr. Jones, is that true or false? A. That's false. Q. Will you please explain

why? A. Yes. The -- on the internet when a client wants to contact another computer, a server or

another device, it just needs the address of that device. It's going to send a packet from that

one -- from, say, the left to the right or the right to the left, and all these packets contain IP addresses

of -- so if I'm sending from the callee to the caller, the callee's IP address is contained in that

packet that goes to the caller. That's how direct communications are set up on the internet. You

don't need IP addresses from both parties to establish that direct communication to begin with.").

That Apple's expert, Dr. Matthew Blaze, disagreed with Dr. Jones does not entitle Apple to JMOL.

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See 4/9 AM Tr. at 130:21–131:1. It is not the Court's job to substitute its judgment for the jury's

and to reweigh the expert testimony to determine a technical fact. *See Ellis v. Weasler Eng'g Inc.*,

258 F.3d 326, 337 (5th Cir. 2001).

Regardless, on this record, the Court concludes that VirnetX introduced substantial

evidence at trial to support the jury's verdict that the "indication" term was met by the third version

of FaceTime. *See* 4/3 PM Tr. at 121:2–124:7. Specifically, Dr. Jones testified that the accept push

message indicates that the FaceTime domain name service system supports establishing a secured

communication link as a "culmination of a provisioning process" and contains the callee's

certificate, a peer-push token, session token, a certificate name for the callee, and other

information. *Id.* at 121:8–122:10. Dr. Jones explained that the accept push message indicates that

the FaceTime servers have successfully authenticated and provisioned both devices to establish a

direct, secure FaceTime call. *See id.* at 121:5–124:4.

Dr. Jones also explained that the FaceTime servers were not conventional DNS servers:

> Q. In what way does the FaceTime DNSS do something beyond
> merely returning DNS records?
>
> A. Well, what it's returning is in that -- that accept push is, first, an
> indication that the provisioning process has been completed and it's
> the FaceTime servers that facilitating that provision process. It also
> includes the command number that's indicating that this is an accept
> instead of reject. It's got the certificate, it's got a push token, and the
> other information I referenced as well.

Id. at 123:8–17. Even Mr. Thirumalai—Apple's fact witness for FaceTime—did not contest Dr.

Jones's explanation of how FaceTime works. *See* 4/5 PM Tr. (Thirumalai) at 206:17–20 ("Are

you aware of anything incorrect about the technical explanation of the operation of FaceTime that

was provided by Dr. Jones? A. No, I don't think so.").

Apple suggests that Dr. Jones's testimony "indicates nothing about support for a *direct*

call, as [it] applies equally to a *non-infringing* relayed call." Docket No. 793 at 1 (emphasis in

original). That the accept push message can also be used to establish a relayed FaceTime call does not change the result because "[t]he addition of features does not avoid infringement, if all the elements of the patent claims have been adopted. Nor is infringement avoided if a claimed feature performs not only as shown in the patent, but also performs an additional function." *N. Telecom, Inc. v. Datapoint Corp.,* 908 F.2d 931, 945 (Fed. Cir. 1990). Although Dr. Blaze disagreed with Dr. Jones and testified that "nothing in [the accept push] indicates support for direct communication," the jury was not required to credit Dr. Blaze's testimony, and the Court again refuses to re-weigh evidence and invade the province of the jury. 4/9 AM Tr. at 21:5.

b. Secure Communication Link

Apple's "anonymity defense was tried in the '417 action. It's a common feature to the new version of FaceTime as well as the old version." 4/2 AM Tr. at 17:10–12. In its filings before trial, Apple represented to the Court that it did "not intend to present a defense regarding the absence of anonymity." Docket No. 628 at 8 n.2. At trial, Apple sought a ruling from the Court precluding the presentation of its anonymity defense. While the Court agreed that Apple could not simply "repeat arguments that are identical to ones from the previous case," it did not rule that any particular argument was foreclosed. *Id.* at 19:15–21. Regardless, however, based upon Apple's representation that the secure communication link noninfringement argument in this case and the 417 action are identical, issue preclusion attaches to Apple's argument in this case, and the Court declines to rule on issues already resolved by the 417 judgment. *See Aspex Eyewear, Inc. v. Zenni Optical Inc.,* 713 F.3d 1377, 1382 (Fed. Cir. 2013).

c. Domain name service system

Before the consolidated trial in 2016, the Court held that "domain name service system" did not incorporate the Court's construction of "domain name service." Apple does not present any new arguments in support of its construction, and the Court declines to reconsider its previous

rulings. *See* 417 action, Docket No. 266 at 20 ("Defendants seek to improperly import limitations from a preferred embodiment into the claim language. The claim language itself provides a description of the domain name service system. Thus, the Court finds that 'domain name service system' does not require construction."); 417 action, Docket No. 732 at 14, n.3 ("However, the Court did not construe 'domain name service system' because the claim language itself provided a description of the term, i.e. that it must 'comprise an indication that [it] supports establishing a secure communication link.' "). Accordingly, Apple is entitled to neither JMOL nor a new trial on this basis.

(2) *VPN On Demand*

VirnetX accuses Apple's VPN on Demand feature of infringing Claims 1 and 7 of the '135 patent and claim 13 of the '151 patent.

A conventional DNS resolves domain names (e.g., "Yahoo.com") into Internet Protocol ("IP") addresses. *See* '135 patent at 37:22–27. A user's web browser then utilizes the IP address to request a website. *Id*. at 37:24–29. The '135 and '151 patents share a common specification disclosing a system in which, instead of a conventional DNS receiving the request, a DNS proxy intercepts it and determines whether the request is for a secure site. *Id*. at 38:23–25. If the request is for a secure site, the system automatically initiates a virtual private network ("VPN") between the proxy and the secure site, but if the request is for a non-secure website, then the DNS proxy forwards the request to a conventional DNS for resolution. *Id*. at 38:43–47.

Claim 1 of the '135 patent has three steps: (1) generating from the client computer a DNS request that requests an IP address corresponding to a domain name associated with the target computer; (2) determining whether the DNS request transmitted in step 1 is requesting access to a secure web site; and (3) in response to determining that the DNS request in step 2 is requesting

access to a secure target web site, automatically initiating the VPN between the client computer and the target computer. Claim 1 and 13 of the '151 patent, respectively, require creating an "encrypted channel" and "secure channel" "between" the client and the secure server. '151 patent at 48:28–29.

The Court's discussion of VPN on Demand, too, is informed by a review of the VPN On Demand product considered in the 417 action. The VPN On Demand accused of infringement in the 417 action maintained an "Always" and an "If Needed Mode." The "Always" mode would check to see whether a requested site in a DNS request was on a user-configurable list and, if so, as the name suggests, would always create a VPN without sending a DNS request to a DNS server. 4/3 PM Tr. at 195:4–14. The "Always" mode ignored location: It would create a VPN without regard to whether the user was inside or outside a private network. *Id.* at 195:13–196:3. The "If Needed" mode was location-based: It would create a VPN if a user was outside the private network, but not if a user was inside the private network. 4/6 PM Tr. 151:13–24. The parties agree that the "If Needed" mode did not infringe. *See, e.g.,* Docket No. 779 at 13; 4/3 AM Tr. at 77:25–78:2.

The jury in the 417 action returned a verdict finding the "Always" mode to infringe, and the Court denied Apple's JMOL motion of noninfringement. *VirnetX Inc. v. Apple Inc.,* 925 F. Supp. 2d 816, 830 (E.D. Tex. 2013). The Federal Circuit affirmed as to literal infringement. *VirnetX,* 767 F.3d at 1322.

VirnetX argued at trial that the redesigned VPN on Demand ("redesigned VOD") replicates the Always mode functionality with "Evaluate Connection." 4/3 AM Tr. at 78: 3–6. Apple contends now that it is entitled to JMOL of noninfringement for the redesigned VOD at issue in this case. Its arguments can be grouped into five categories: (1) fact-based noninfringement

arguments about the redesigned VOD functionality; (2) arguments that HTTPS probe is optional and location-based; (3) arguments about an interception requirement; (4) arguments analogizing the redesigned VOD to the "If Needed" mode in the 417 action; and (5) arguments about actual use.

a. *Fact-based noninfringement arguments*

In its motion, Apple first presents the Court with a series of factual representations about redesigned VOD functionality, suggesting that, under Apple's description of the redesigned product functionality, it is entitled to JMOL of noninfringement. However, in each instance, there is substantial evidence supporting the verdict, and the Court declines to reweigh the evidence on JMOL and substitute its judgment for that of the jury.

For example, Apple argues that "the decision to start a VPN is based on something other than a DNS request." Docket No. 775 at 8. But at trial, VirnetX's expert, Dr. Jones, explained that the domain name matching in VPN on Demand is based on the domain name in the DNS request. *See* 4/10 AM at 66:7–25. Dr. Jones also explained that, when VPN on Demand checks the results of the probe, it "is determining whether or not the DNS request that's being made is being made from the outside to the firewall to the server on the inside or is being made from within the firewall." *Id*. at 67:10–21. In its reply, Apple disagrees with Dr. Jones and states that, "[b]ecause infringement depends solely on the optional probe's failure, any 'determination' is based on the probe, not the request." Docket No. 783 at 5. But Apple's disagreement with Dr. Jones is not a basis for JMOL, and the jury was entitled to credit Dr. Jones's testimony on this fact.

Apple also argues that the probe failure occurs "only after a DNS request is made and returns a successful result." Docket No. 775 at 8. But the jury was entitled to credit Dr. Jones's trial testimony that the results of the HTTPS probe are checked after the DNS request is made, but by that point, "[t]he probe has already failed or succeeded." *See* 4/10 Sealed Tr. at 92:3–25.

Similarly, Apple argues that the HTTPS probe cannot determine whether a server is a secure server because it accesses "a wholly separate probe server." Docket No. 775 at 9. Apple provides no basis, however, for the Court to disregard the record evidence that the probe server and the target server are on the same private network and that redesigned VOD determines whether the target server is behind a firewall (and therefore "requires authorization for access") based on whether the probe is able to reach the probe server. *See* 4/3 AM Tr. at 80:4–11.

Apple also suggests that redesigned VOD creates VPNs based on the DNS response, not the DNS request. Docket No. 775 at 10. But, at trial, Dr. Jones testified that, when the DNS request matched a domain name in the list and the probe failed, VPN on Demand will start a VPN "no matter what comes back" in the DNS response. *See* 4/3 AM Tr. at 81:11–23. He explained that, if the DNS response contains an IP address, VPN on Demand will discard it. *See id*. at 82:4–10.

According to Apple, with respect to claim 13 of the '151 patent, VPN on Demand always forwards the DNS request to a DNS function that returns an IP address, regardless of whether the DNS request corresponds to a secure server. Docket No. 775 at 10–11. But there is substantial evidence in the record suggesting that, while VPN on Demand forwards all DNS requests to conventional DNS (*see* 4/4 AM Tr. at 16:21–17:15), VPN on Demand only forwards the DNS request to a DNS function that returns an IP address of a nonsecure computer—as is required by claim 13—if the DNS request does not correspond to a secure server. *See* 4/4 AM Tr. at 17:16–22 ("Q. And there is nothing in iOS 7 VPN On Demand which makes a determination whether or not to send a DNS request in DNS function on the basis of whether the request is to secure or unsecure server. Right? A. There is a check to see if it's going to send to a DNS function that

returns an IP address within the code, yes. If you're talking about sending it to an external server, no.").

b. *The optional HTTPS probe is location based*

According to Apple, the fact that the optional HTTPS is location-based is fatal to VirnetX's claim. Docket No. 775 at 7–10. Apple maintains that, to the extent the optional HTTPS probe performs any "determination," it is a determination as to the location of the requesting device relative to the private network, not a determination as to any requested server's security. *Id.* at 9. Apple argues that Dr. Jones's infringement theory that the requesting device's location can determine whether a server is "secure" or "not secure" is "absurd." *Id.*

The asserted claims of the '135 and '151 patents require determining whether a DNS request is requesting access to a secure web site or secure server. VirnetX introduced evidence at trial that redesigned VOD performs this determination by comparing the domain name of the DNS request against a list of domain names in a configuration file and by consulting the result of the HTTPS probe. *See* 4/3 AM Tr. at 86:14–87:22. Dr. Jones testified that, "when the name matches and the probe has failed, that indicates that to reach that computer it's going to -- it can't reach it without authorization. In other words, the probe failed. It couldn't get there. And by being on the list, the IT administrators indicated that this is a computer that can communicate in a VPN." *Id.* at 87:16-22. This evidence satisfies the Court's claim constructions. *See* Docket No. 180 at 24 and 27 (construing "secure web site" to mean "a web site that requires authorization for access and that can communicate in a VPN" "secure server" to mean "a server that requires authorization for access and that can communicate in an encrypted channel.").

Apple suggests that it is "absurd" for a server to be a "secure server" depending on whether the requesting device is outside the private network. The record evidence demonstrates that whether the requesting device is inside or outside the private network affects whether a server

requires authorization for access (which is a requirement of the Court's construction of "secure server"). *See* 4/4 AM Tr. at 32:4–14.

Even Apple's fact witness for redesigned VOD, Mr. Simon Patience, explained at trial that the location of a requesting device can bear on whether a target server is a "secure server" that requires authorization for access and can communicate in a VPN. Mr. Patience testified that redesigned VOD creates a VPN based on whether there is a firewall between the device and the target server. *See* 4/6 PM Tr. at 165:18–166:2; 164:23–165:7; 170:10–16. According to Mr. Patience, "the location probe is just another test to determine whether you're inside or outside the firewall." *Id*. at 167:22–168:3. Mr. Patience also confirmed that the list of domain names "is supposed to contain a list of things behind the firewall." *Id*. at 214:8–14. Mr. Patience also testified that servers behind a firewall are secure servers. *Id*. at 198:11–17 ("Q. Do you see this server? A. Yes. Q. Is that a secure server? A. Yes. I – you could consider it to be one, yes. Q. You could consider it to be one or not? A. Well, the fact that it's behind a firewall would tend to imply that it is a secure server, yes."). Importantly, Mr. Patience applied the Court's construction of "secure server," as he also confirmed that servers behind firewalls require authorization for access that can communicate in a VPN. *Id*. at 204:11–15 ("Q. When the device is outside of the firewall, does it require authorization for access to communicate with a server within the firewall? A. Yes, because that's what VPN is. VPN is the authorization.").

On this record, it is clear that the fact that the HTTPS probe is location-based is not fatal to VirnetX's claims, and Apple is not entitled to JMOL on this basis.

> ### c. *Redesigned VOD does not intercept DNS requests before they are sent to a DNS server*

In its motion, Apple first characterizes the '135 and '151 patents as introducing a "DNS proxy" "that intercepts DNS requests *before they are sent to a DNS server* and automatically

creates a VPN if the DNS request corresponds to a secure site." Docket No. 775 at 6–7 (emphasis in original). In its reply, Apple reprises this argument, stating that "DNS requests must be intercepted before transmission to avoid hampering anonymous communications on the Internet." Docket No. 783 at 5 (internal citations omitted).

As a preliminary matter, the Court notes that, on a JMOL motion, it applies its claim constructions. The Court has not construed the asserted claims to require a "DNS proxy that intercepts DNS requests *before they are sent* to a DNS server." Apple did not attempt to seek a ruling from the Court that claims have this temporal limitation, and its contention that the claims are so limited is therefore waived. *See Conoco, Inc. v. Energy & Envtl. Int'l, L.C.*, 460 F.3d 1349, 1359 (Fed. Cir. 2006) ("[L]itigants waive their right to present new claim construction disputes if they are raised for the first time after trial."). Post-trial motions are not a vehicle to seek new constructions and retroactively apply them to the evidence introduced at trial.

d. *Redesigned VOD replicates the noninfringing "If Needed" mode*

According to Apple, the old "If Needed" mode of VPN on Demand was location-based: "[I]t would create a VPN if a user was outside the private network, but not if a user was inside the private network." Docket No. 775 at 8. Apple maintains that, "like the prior 'If Needed' mode, the redesigned version of VOD is location-based—it creates a VPN only if a user needs one to connect to the requested site." *Id*. In its reply, Apple also states that redesigned VOD "operates in the same way" as the old "If Needed" mode by first "attempt[ing] to connect insecurely and only creates a VPN if needed." Docket No. 783 at 4.

The Court questions the value in comparing the accused product to a non-infringing product to determine whether the accused product infringes. Indeed, in its motion, Apple recognizes that an infringement analysis comparing accused products with old products, rather

than the claims, is "undisputedly incorrect." Docket No. 775 at 37 (citing *Zenith Labs., Inc. v. Bristol-Meyers Squibb Co.*, 19 F.3d 1418, 1423 (Fed. Cir. 1994)).

In any event, VirnetX presented evidence that, while the "If Needed" functionality would attempt to make an unsecure connection to a domain name if it could, the redesigned VOD does not first attempt to connect insecurely. *See* 4/3 AM Tr. at 76:6–10; 80:24–82:10. VirnetX also presented evidence that, unlike redesigned VOD, which creates a VPN based on the domain name matching the results of the HTTPS probe, the "If Needed" mode triggered a VPN only if the domain name could not be resolved by conventional DNS. *Id*. at 76:17–77:14; PX308. Accordingly, Apple is not entitled to JMOL on this basis.

Apple also specifically requests a new trial based on VirnetX's arguments at trial that Apple "moved" the infringing Always mode functionality into the redesigned VOD. Docket No. 775 at 37. To be clear, *both* parties discussed the previous iterations of VPN on Demand at length at trial. *See, e.g.*, 4/6 PM (Direct examination of Apple's witness, Mr. Patience) Tr. at 172:9–16 ("Q. Now, how does the operation of If Needed in iOS 7 to 11 compare to the Always mode that was removed from iOS 3 to 6? A. So Always is just driven by the name of the server. It just will always create a VPN if it finds the name of a server on this list. And so it would create a VPN when it's outside of the firewall because the name is on the list. And inside the firewall it will create a VPN also because the name is on the list.").

However, as discussed above, VirnetX presented sufficient evidence of infringement to withstand Apple's JMOL motion, without including any reference to the previous Always mode. Indeed, the Court cannot identify any prejudice to Apple from the parties' discussions of the Always mode. The jury's verdict is not against the great weight of the evidence, and Apple is not entitled to a new trial on this basis.

e. Actual use

In its motion, Apple argues that VirnetX based its infringement theory on a specific and optional operating scenario for redesigned VOD but offered no evidence that anyone configured or used VOD in the infringing manner. Docket No. 775 at 11. According to Apple, VirnetX only offered evidence of redesigned VOD's capability to infringe, which is insufficient because the claim language here is not drawn to mere capability. *Id.* Apple suggests that VirnetX did not identify use of the infringing configuration by Apple or its customers.

VirnetX responds that claim 13 of the '151 patent is an apparatus claim, which can be infringed by a device having the claimed structure capable of functioning as described by the claim. Docket No. 779 at 15. VirnetX contests whether direct infringement of this claim requires proof of use like a method claim and argues that the claim is drawn to structure that has a specified capability. *Id.* at 16. With respect to the method claims of the '135 patent, VirnetX points to Dr. Jones's testimony that Apple directly infringes by testing VPN on Demand and an internal Apple email documenting a VPN On Demand test plan. *Id.* at 17. VirnetX also argues that the failure of the HTTPS probe is not a condition of infringement and that the probe need only be configured to infringe. *Id.*

"[I]n every infringement analysis, the language of the claims, as well as the nature of the accused product, dictates whether an infringement has occurred." *Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1204 (Fed. Cir. 2010). "To infringe a method claim, a person must have practiced all steps of the claimed method." *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1317 (Fed. Cir. 2009). "Direct infringement of a method claim can be based on even one instance of the claimed method being performed." *Mirror Worlds, LLC v. Apple Inc.*, 692 F.3d 1351, 1359 (Fed. Cir. 2012) (citing *Lucent*, 580 F.3d at 1317).

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An accused device may be found to infringe if it is reasonably capable of satisfying the claim limitations, even if it is also capable of noninfringing modes of operation. *Hilgraeve Corp. v. Symantec Corp.*, 265 F.3d 1336, 1343 (Fed. Cir. 2001) (collecting cases). A claim that recites *capability* and not actual operation may be infringed when it is capable of operating in the claimed mode. *Finjan*, 626 F.3d at 1204. "[W]hen the asserted claims recite capability, [Federal Circuit] case law supports finding infringement by a 'reasonably capable' accused device on a case-by-case basis particularly where . . . there is evidence that the accused device is actually used in an infringing manner and can be so used without significant alterations." *Ericsson, Inc. v. D-Link Sys.*, Inc., 773 F.3d 1201, 1217 (Fed. Cir. 2014).

1. Method Claims

The asserted claims of the '135 patent are method claims for which there is record evidence supporting a finding of infringement. For example, Dr. Jones testified that Apple directly infringes by testing VPN on Demand. *See* 4/3 PM Tr. at 131:10–12. Additionally, VirnetX introduced PX1018 into the trial record, which is an internal Apple email documenting a "VPN On Demand test plan" that involves the "RequiredURLStringProbe" (i.e., the HTTPS probe). Although the jury could have found that the testing described in the document never occurred, it could equally and reasonably have concluded that the described test plan was carried out. And the Court must "draw all reasonable inferences in the light most favorable to the verdict and cannot substitute other inferences that [the court] might regard as more reasonable." *E.E.O.C. v. Boh Bros.*, 731 F.3d at 451.

Apple suggests that actual failure of the HTTPS probe is a condition of infringement. But the asserted claims of the '135 do not require that a VPN is always established, and the probe's success or failure only bears on whether a VPN is created. If VPN on Demand determines that the

DNS request is not requesting access to a secure website (e.g., if the HTTPS probe did not fail), then the step need not be carried out in order for the claimed method to be performed. *See Cybersettle, Inc. v. Nat'l Arbitration Forum, Inc.*, 243 Fed. Appx. 603, 607 (Fed. Cir. 2007) ("It is of course true that method steps may be contingent. If the condition for performing a contingent step is not satisfied, the performance recited by the step need not be carried out in order for the claimed method to be performed.").

Apple also suggests that there is no evidence that its customers directly infringe the asserted claims of the '135 patent. Docket No. 775 at 13. The record suggests that Apple infringed with the Always mode; it announced it was removing that feature; there was customer backlash; and Apple subsequently released the new version of VPN on Demand, which replicates the Always mode. *See* 4/3 PM Tr. at 133:2–134:14; PX1007; PX1012. This is at least circumstantial evidence that some subset of Apple's customers directly infringe the '135 patent with the new version of VPN on Demand. *See Moleculon Research Corp. v. CBS, Inc.*, 793 F.2d 1261, 1272 (Fed. Cir. 1986). Accordingly, Apple is not entitled to JMOL of noninfringement on the method claims.

2. Apparatus claims

Claim 13 of the '151 patent is drawn to structure that has a specified capability. The structure it requires is "computer readable medium" that has "computer readable instructions[.]" The instructions are claimed by reference to the steps they perform, but the claim explicitly states that the steps are performed "when executed[.]" As such, Apple directly infringes when it makes, uses, offers to sell, sells, and imports devices containing VPN on Demand because VPN on Demand is capable of operating in an infringing mode. *See* 35 U.S.C. § 271(a); *Intel Corp. v. U.S. Int'l Trade Comm'n*, 946 F.2d 821, 832 (Fed. Cir. 1991) ("Because the language of claim 1 refers to 'programmable selection means' and states 'whereby when said alternate addressing mode is

selected,' the accused device, to be infringing, need only be capable of operating in the page mode.").

The functional language in claim 13 does not change the infringement analysis: Functional language in an apparatus claim requires that an accused apparatus be capable of performing the recited functions. *Intel*, 946 F.2d at 832; *see also Revolution Eyewear, Inc. v. Aspex Eyewear, Inc.*, 563 F.3d 1358, 1369–70 (Fed. Cir. 2009) ("[C]laim 22 here only requires a capacity to perform a function . . . ."); *Microprocessor Enhancement Corp. v. Texas Instrum. Inc.*, 520 F.3d 1367, 1375 (Fed. Cir. 2008) ("Claim 7 . . . is clearly limited to a pipelined processor possessing the recited structure and capable of performing the recited functions . . ."); *UltimatePointer, L.L.C. v. Nintendo Co.*, 816 F.3d 816, 826 (Fed. Cir. 2016) ("[T]he 'generating data' limitation reflects the capability of that structure[.]"); *MasterMine Software, Inc. v. Microsoft Corp.*, 874 F.3d 1307, 1315 (Fed. Cir. 2017) ("Though claim 8 includes active verbs—presents, receives, and generates—these verbs represent permissible functional language used to describe capabilities of the 'reporting module.'").

Regardless, however, VirnetX presented at least circumstantial evidence at trial of actual infringement. VirnetX introduced PX1018, in which an Apple employee explains that the "VPN On Demand test plan" would "[i]deally . . . be presented to the customer." PX1018. The jury was entitled to infer from this evidence that Apple carried out its test plan and followed through on its plan to present it to customers. PX1018. Accordingly, Apple is not entitled to JMOL of noninfringement.

(3) *iMessage*

Apple seeks JMOL on its counterclaim that iMessage in iOS 5–8 and OS X 10.8–10.10 does not infringe because VirnetX's claim of infringement and Apple's counterclaim for declaratory judgment of noninfringement have not been dismissed. Docket No. 775 at 14.

In the 417 action, VirnetX asked this Court to enter judgment on Apple's dropped invalidity theories after the 2012 trial. *See* 417 action, Docket No. 732 at 45–46. These theories and references were asserted up to the time of trial but were never presented to the jury. *Id*. at 45. Noting that there must be a "continuing case or controversy with respect to withdrawn or otherwise unasserted claims" for the Court to enter judgment, the Court declined to do so. *Id*. at 46.

"[T]he existence of a case or controversy must be evaluated on a claim-by-claim basis." *Jervis B. Webb Co. v. S. Sys., Inc.*, 742 F.2d 1388, 1399 (Fed. Cir. 1984). And "jurisdiction must exist at all stages of review, not merely at the time the complaint was filed." *Streck, Inc. v. Research & Diagnostic Sys., Inc.*, 665 F.3d 1269, 1282 (Fed. Cir. 2012) (internal quotation marks omitted). The Court cannot and will not enter judgment on claims and defenses that were not presented for consideration to the jury because there is no basis to do so. *See Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1553 (Fed. Cir. 1983); *Datascope Corp. v. Smec, Inc.*, 776 F.2d 320, 327 (Fed. Cir. 1985) (noting that references in pleadings do not support a judgment that particular claims are invalid when "the validity of those claims were not litigated by the parties at trial"); *Nordisk Pharm., Inc. v. Bio-Technology Gen. Corp.*, 424 F.3d 1347, 1356 (Fed. Cir. 2005) (vacating the district court's order invalidating a claim not litigated at trial).

Parties routinely drop asserted claims and defenses in their cases as litigation progresses, and the Court declines to penalize or discourage the parties' efforts in narrowing the case for trial. Accordingly, Apple is not entitled to JMOL of noninfringement for iMessage.

(4) *Indirect Infringement*

Apple also argues that it is entitled to JMOL and a new trial on indirect infringement because VirnetX failed to prove that Apple had specific intent to encourage infringement. Docket No. 775 at 15. In response, VirnetX suggests that the evidence supporting the jury's willfulness finding equally supports its finding of specific intent. Docket No. 779 at 19.

The trier of fact was provided with sufficient evidence from which to infer Apple's knowledge that use of its products would constitute infringement and Apple's specific intent. For example, for VPN on Demand, VirnetX presented evidence at trial that Apple knew about the patents-in-suit before the redesign, knew that the previous version infringed, and replicated that original design. *See* 4/3 PM Tr. at 132:20–133:1. Further, the test plan document introduced at trial includes an infringing configuration and Apple states therein that the configuration "would be presented to the customer[.]" PX1018. This is sufficient evidence from which the jury could conclude that Apple intended its customers to infringe.

For FaceTime, VirnetX presented evidence that Apple was able to avoid infringement via full relay but chose to resume infringement with direct FaceTime calls. 4/3 AM Tr. at 135:22–136:2. VirnetX also presented evidence that Apple "broke" FaceTime on older phones to force customers to resume direct calls in iOS 7. *See* 4/5 PM Tr. at 272:22–273:2; PX1020; PX1031; PX1106. Similarly, VirnetX presented evidence that Apple has encouraged its users to make FaceTime calls through marketing of the feature (*see, e.g.*, PX1098)—calls that the jury determined to be infringing.

On this record, the Court is persuaded that the jury had a sufficient evidentiary basis from which to conclude that Apple both knowingly induced infringement and possessed specific intent to encourage its customers' infringement. *See ACCO Brands, Inc. v. ABA Locks Mfr. Co.*, 501

F.3d 1307, 1312 (Fed. Cir. 2007). The jury's verdict is supported by substantial evidence and is not against the great weight of the evidence. Accordingly, Apple is not entitled to JMOL or a new trial on indirect infringement.

B. Apple's Motion for Judgment as a Matter of Law and a New Trial on Damages

The Court struggles to identify a single basis Apple provides for its JMOL on damages that it has not already considered at length in the context of *Daubert* motions and the 417 post-trial. The Court questions whether repeated review of the same arguments in detail is a judicious use of the Court's resources. To be sure, the Court concluded at summary judgment that the damages questions between the 417 action and this matter were not identical for the purposes of issue preclusion because of disputes about the hypothetical negotiation date and about the accused products' functionality. Docket No. 553 at 7. At trial, however, Apple presented damages testimony that was nearly identical to that presented in the 417 action.

In fact, a comparison of Apple's post-trial brief in the 417 action and this case reveals that Apple's arguments mirror those in the 417 action. Apple has asserted in both cases' post-trial briefing that (1) no reasonable jury could rely on the VoIP licenses; (2) Mr. Weinstein failed to apportion; (3) Mr. Weinstein's model violated the entire market value rule; (4) Apple is entitled to an offset for units that included Skype; and (5) no reasonable jury could award more than Apple's expert's prescribed royalty rate per unit. The Court considers each argument below.

(1) *Reliance on the VoIP licenses*

Apple argues that Mr. Weinstein failed to account for the differences between the Voice-over-IP licenses he considered and the hypothetical VirnetX-Apple license. Specifically, Apple argues: (1) that each VoIP license is for a longer period of time and for more patents than the hypothetical license; (2) that the VoIP licenses cover products that are less complex and have fewer

features than the accused products; (3) that the VoIP licenses were litigation licenses; (4) that the VoIP licenses were paired with IP PBX servers, which Apple does not sell; and (5) that Mr. Weinstein devalued the Microsoft license. Docket No. 775 at 18–22.

"Prior licenses . . . are almost never perfectly analogous to the infringement action." *Ericsson*, 773 F.3d at 1227. "For example, allegedly comparable licenses may cover more patents than are at issue in the action, include cross-licensing terms, cover foreign intellectual property rights, or, as here, be calculated as some percentage of the value of a multicomponent product." *Id*. These differences must be explained to the jury so they can account for "the need to discount reliance on a given license to account only for the value attributed to the licensed technology." 773 F.3d at 1228; *see also VirnetX*, 767 F.3d at 1330 ("Moreover, all of the other differences that Apple complains of were presented to the jury, allowing the jury to fully evaluate the relevance of the licenses.").

To some extent, each of Apple's criticisms is a *Daubert* attack on Mr. Weinstein's opinion, and the Court has already held that Apple's concerns are related to the weight of this testimony, not its admissibility. Docket No. 362 at 3 ("Although Apple presents valid criticisms of Dr. Jones's opinions, they go to the weight of the evidence rather than admissibility."). Nevertheless, Mr. Weinstein explained the factual circumstances surrounding each license he relied on at length to the jury. *See* 4/5 AM Tr. at 40:10–61:25. The Court can identify no error in the jury relying on these licenses in determining the appropriate royalty rate in this case.

(2) *Failure to apportion*

Apple also challenges Mr. Weinstein's opinion to the extent he failed to apportion the VirnetX licensing policy. According to Apple, the policy applies to the price of the end product, but "[n]othing in the policy explains what, if any, apportionment was done to devise that policy."

Docket No. 775 at 23. Even if the policy and licenses are apportioned, however, Apple contends that the Apple devices are more complex than the VoIP phones and that this difference was not accounted for. *Id*. Apple also suggests that Mr. Weinstein's opinion is faulty because he opined that a per-unit royalty rate should remain constant regardless of the number of accused features in the accused device. *Id*. at 23. And Apple maintains that the royalty rate is improper because it exceeds the market price of FaceTime. *Id*. at 24.

To the extent Apple complains that Mr. Weinstein failed to apportion the *licenses*, such apportionment is not necessary because the rates in the license agreements are real-world rates, apportioned to reflect the value of VirnetX's technology to those companies who entered into them. *See also Ericsson Inc. v. D-Link Corp.*, No. 6:10-cv-473, 2013 WL 2242444, *2–3 (E.D. Tex. May 21, 2013) ("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."); 4/4 PM Tr. at 11:13–12:14 (Larsen).

Apple has not identified any authority suggesting that a company's general licensing policy—that it applies to all potential licensees—must be apportioned on a per-defendant basis before it can be admissible or relevant to damages. Regardless, Mr. Weinstein understood the licensing policy to be apportioned. *See* 4/5 AM Tr. 121:9–12 ("Well, I think I've testified how I believe that VirnetX's licensing policy contemplates rates that are apportioned to reflect the contribution that VirnetX's technology makes to the final products of licensees."). That Mr. Weinstein could not describe how the apportionment "was done" in the initial licensing policy does not render his opinion unreliable, and goes to the credibility the trier of fact could assign to his testimony. *See* Docket No. 775 at 18. Ultimately, Mr. Weinstein's damages calculations were

based on real-world license agreements entered into pursuant to the policy, which were described in detail for the jury to evaluate.

Apple suggests that Mr. Weinstein's opinion that the per-unit royalty rate should remain constant regardless of the number of accused features present in the given device is improper. Docket No. 775 at 22–23. But the jury heard substantial evidence explaining the basis for this opinion that the royalty rate was not dependent on the number of accused features. *See, e.g.*, 4/5 AM Tr. at 86:19–94:7. The Court is not persuaded that Mr. Weinstein's opinion is unreliable, and the jury was entitled to credit his opinion.

Apple also makes a number of factual arguments for which the Court declines to substitute its judgment for that of the jury. For example, Apple claims that the royalty for FaceTime could not have been more than the alleged price of FaceTime. Docket No. 775 at 23–24, 26. This argument was presented to the jury, and the jury was entitled to reject Apple's argument that its pricing of FaceTime was a "market price" that reflected the value of the product. *Compare* 4/9 PM Tr. at 260:23–261:7, *with* 4/5 PM Tr. at 169:17–172:3.

Additionally, Apple suggests that, because VirnetX accused a single implementation of redesigned VOD of infringement and because VOD has other, noninfringing modes of operation, the damages award is greater than VOD's footprint in the marketplace. Docket No. 775 at 24. In response, VirnetX suggests that Apple discounts the "huge importance of the presence of the infringing functionality in VPN On Demand." Docket No. 779 at 28 (citing 4/5 AM Tr. at 64:18–66:19, 68:7–70:16; PX1007; PX 1121; PX1012.03; PX1010). In its reply, Apple reprises its argument that there is no evidence that anyone used redesigned VOD to infringe, but the Court has already rejected this argument with respect to liability above. Accordingly, Apple is not entitled to JMOL on this basis.

(3) *Entire market value rule* (**"EMVR"**)

Apple argues that use of VirnetX's licenses to calculate per-unit rates violates the EMVR. Docket No. 775 at 25. As the Federal Circuit explained in *Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1226 (Fed. Cir. 2014), the entire market value rule has two parts: a substantive legal rule and a separate, evidentiary principle. The substantive legal rule mandates that an ultimate reasonable royalty award be based on the incremental value that the patented invention adds to the end product. *Id.* The evidentiary principle, applicable specifically to the choice of a royalty base, is that where a multi-component product is at issue and the patented feature is not the item which imbues the combination of the other features with value, care must be taken to avoid misleading the jury by placing undue emphasis on the value of the entire product. *Id.*

Mr. Weinstein's reliance on *actual* licenses entered into for the patented technology does not violate the EMVR. Importantly, the jury was never tasked with applying a royalty rate percentage to the entire value of any Apple product. Instead, Mr. Weinstein's model applied a per-unit rate of $1.20 based on certain VirnetX licenses (the per-unit royalty rate) to the number of accused units sold (the royalty base). As was true in the 417 action, the Court also instructed the jury not to consider any outside knowledge they may have had about the total revenue or total price of the accused products, which it presumes the jury followed. *See* Docket No. 721 (jury instructions) ("VirnetX has relied on license agreements in which royalties were based on a percentage of the entire price of the licensed end-products. But in determining a reasonable royalty, you must not rely on the overall price of Apple's accused products at issue in this case."); *See Francis v. Franklin*, 471 U.S. 307, 324 n.9 (1985). Accordingly, this is not a basis for judgment as a matter of law or a new trial.

(4) *Skype offset*

Next, Apple argues, as it did in the 417 action, that "it is entitled to a partial offset of any damages for products that are already licensed, including, for example, accused devices that already include Skype." Docket No. 775 at 25–26; 417 action, Docket No. 1079 at 14. As was true in the 417 action, "Apple never pled a license defense, and Apple presented no evidence that its devices are shipped with Skype included." 417 action, Docket No. 1079 at 17. "Apple also provides no explanation for why the actions of its end-users to modify its product post-sale should bring Apple under the protection of third-party licenses." *Id*. Finding no basis to reconsider its prior ruling, the Court denies Apple's motion for judgment as a matter of law on this basis.

(5) *Royalty rate*

Apple also asserts in its motion that "no reasonable jury" could disagree with its damages expert. Docket No. 775 at 26–27. The Court declines to substitute its judgment for that of the jury and will not reweigh the evidence and credit Apple's expert over Mr. Weinstein. The jury was free to disbelieve Apple's expert and credit Mr. Weinstein's testimony, which provided substantial evidence for its verdict. *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 848 (Fed. Cir. 2010). Accordingly, Apple's motion for JMOL on this basis is denied.

C. Apple's Motion for Judgment as Matter of Law and New Trial on Willfulness

The issue of willfulness was bifurcated; after the jury returned a verdict finding Apple liable for infringement and damages, the jury was tasked with the question of willfulness in a second "phase" of trial. After approximately two hours and thirty minutes of deliberations, the jury ultimately returned a verdict that Apple's infringement was willful.

Apple now moves for judgment as a matter of law and a new trial on the issue of willfulness. A jury's finding of willfulness merely "opens the door" to the Court exercising its

discretion to enhance damages. *See Read Corp. v. Portec, Inc.*, 970 F.2d 816, 826 (Fed. Cir. 1992) ("a finding of willful infringement does not mandate that damages be enhanced"); *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923, 1933 (2016).

As is discussed in detail, *infra* Section II.A, the Court has exercised its discretion to decline enhancing damages in this matter. Because the Court declines to award enhanced damages, Apple's willfulness JMOL and new trial motions are moot. *See Presidio Components, Inc. v. American Technical Ceramics Corp.*, Case No. 14-02061-H-BGS (S.D. Cal. Aug. 17, 2016) at 21 (noting that Defendant's JMOL motion on willfulness was "essentially moot because the Court, exercising its sound discretion, ultimately declines to award [Plaintiff] enhanced damages despite the jury's finding of willful infringement."); *Schwendimann v. Arkwright Advanced Coating, Inc.*, No. CV 11-820 (JRT/HB), 2018 WL 3621206, at *21 (D. Minn. July 30, 2018) (citing *Laitram Corp. v. NEC Corp.*, 115 F.3d 947, 955 (Fed. Cir. 1997)) ("A court's denial of enhanced damages renders a motion for judgment as a matter of law on willful infringement moot."); *Greatbatch Ltd. v. AVX Corp.*, Case No. 13-723 (D. Del. Mar. 30, 2018) at 14 (concluding that, after two trials on the asserted patents and products and having reviewed all of the evidence, the Court determined it could deny enhanced damages "before a finding on willfulness"); *Erfindergemeinschaft Uropep Gbr v. Eli Lilly And Company et al*, Case No. 2:15-cv-1202 (Bryson, J.), Docket No. 346, 4/25/17 Trial Tr. at 1390:25–1391:3 (granting Rule 50 motion on willfulness); 1500:14–22 (later explaining that, "had willfulness gone to the jury and had there been a verdict of willful infringement in this case, I – based on the evidence I heard in the course of the trial, I would have exercised my discretion not to award enhanced damages under 35 USC, Section 284.").

D. Apple's Remaining Arguments for New Trial

In its omnibus motion, Apple moved for JMOL and a new trial on several grounds discussed above. Aside from the arguments already considered, Apple made additional arguments which the Court addresses below.

(1) *Domain name service system instruction*

At trial, the Court gave the jury the following instruction:

> You have heard discussion about a construction for the word "domain name service." You were instructed that the construction for "domain name service system," an element of all of the asserted claims of the '504 and '211 patents, does not incorporate or include the Court's construction for the term "domain name service."

4/10 AM Tr. at 128:10–15. Apple challenges this instruction as confusing to the jury, prejudicial to Apple and irrelevant to the issues in the case. Docket No. 775 at 35. In its motion, Apple does not explain what prejudice Apple has suffered as a result of the instruction. In fact, Apple explains in its reply that its own expert "*agreed* that the 'domain name service' construction was not incorporated into 'domain name service system.' " Docket No. 783 at 14 (citing 4/9 AM Tr. at 113:23–114:1). The Court can identify at least one instance in the record where Dr. Blaze, in response to Apple's examination, suggested that the construction for "domain name service" applied to "domain name service system." *See* 4/9 AM Tr. at 104:13–24 ("Q. I have put up on Slide 57 three of the Court's claim constructions. Okay? A. Right. Q. Secure communication link, domain name service, and the indication term. Okay? A. Yes. Q. Which one of these claim constructions does not apply to the '504 and '211 patents, sir? A. Well, the – I'm not sure what – I'm not sure what you're asking. There's a domain name service. There's an indication. There's a secure communication. All these terms are here."). This testimony justifies the Court's instruction.

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But even if Apple was correct that the instruction was unnecessary, it is unclear what prejudice Apple suffered from the Court explaining the nuances of its claim construction to the jury. Accordingly, this is not a basis for a new trial.

(2) *EMVR and hypothetical negotiation instructions*

Apple asks the Court for a new trial based on its exclusion of Apple's proposed EMVR instruction and based upon the formulation of its hypothetical negotiation instruction. As the Court concluded above, Mr. Weinstein's testimony did not implicate the entire market value rule, so any instruction thereto would have been inappropriate. Indeed, as in the 417 case, "[t]hough the prices of Apple's devices were never presented to the jury, the Court instructed the jury, out of an abundance of caution, not to rely on the full price of any Apple product." 417 action, Docket No. 1079; *see* Docket No. 721 (jury instructions) ("VirnetX has relied on license agreements in which royalties were based on a percentage of the entire price of the licensed end-products. But in determining a reasonable royalty, you must not rely on the overall price of Apple's accused products at issue in this case.").

The Court presumes that the jury followed this instruction. *See Francis v. Franklin*, 471 U.S. 307, 324 n.9 (1985). Again, "[f]urther instructions on the precise contours of the entire market value rule may have led the jury to mistakenly believe that it could apply the rule despite the fact that the record did not support the rule's applicability." 417 action, Docket No. 1079 at 28.

Apple also challenges the Court's instructions on the hypothetical negotiation. The Court provided the same instruction in the 417 retrial and again concludes that the instruction as a whole properly conveyed to the jury that the reasonable royalty should reflect the fair market value of the technology. Moreover, Apple has not identified what meaningful difference there is between the Court's instruction and Federal Circuit case law. *Compare* 4/10 AM Tr. at 135:5–8, *with Lucent*,

580 F.3d at 1324 (explaining that, in analyzing the hypothetical negotiation, the Court must ask, "Had the Infringer not infringed, what would the Patent Holder have made?" and that "the hypothetical negotiation or the 'willing licensor-willing licensee' approach, attempts to ascertain the royalty upon which the parties would have agreed had they successfully negotiated an agreement just before infringement began.") (internal citations omitted). Accordingly, Apple is not entitled to a new trial on this basis.

Accordingly, Apple's motion for a new trial based on the hypothetical negotiation instruction and on the exclusion of its EMVR instruction is **DENIED**.[1]

(3) *Great weight of the evidence*

Apple also argues that it is entitled to a new trial because the damages award is excessive and against the weight of the evidence. Docket No. 775 at 42–44. Apple reasons that VirnetX improperly asked the jury to "punish" Apple for its previous infringement and that Mr. Weinstein's damages methodology is faulty. The Court has discussed Mr. Weinstein's methodology at length, and declines to reconsider it here.

Apple cites the following statement as "suggesting that Apple should get a worse deal than every other licensee because it previously infringed": "[Apple] showed up having been trespassing on this property for years. And so in 2013 they say, Yeah, we're an agreed infringer, but we want a better rate than anyone who showed up and took a license voluntarily. We want a better rate than anybody." Docket No. 775 at 43; 4/10 Tr. at 161:12–16. Apple fails to articulate, however, how this comment suggests that Apple should be punished for its previous infringement. *Id*.

In support, Apple cites *Gilster v. Primebank*, 747 F.3d 1007, 1011 (8th Cir. 2014). But the remarks in this case are a far cry from those at issue in *Gilster*. In *Gilster*, the Eighth Circuit

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[1] The Court notes that it provided the same hypothetical negotiation instruction in the 417 action and, likewise, denied Apple's motion for a new trial on this basis as well. *See* 417 action, Docket No. 1079 at 28.

reversed a district court's denial of a new trial motion when, during closing argument in a sexual harassment case, Plaintiff's counsel referred "to an experience in her own life . . . 'plainly calculated to arouse the jury's sympathy' . . . [and] ended the argument by 'giving' the jury the 'power and the responsibility for correcting injustices.' " 747 F.3d at 1011. Specifically, the Eighth Circuit noted that "improper vouching permeated counsel's rebuttal argument." *Id*. These circumstances are not present here, and the Court declines to grant a new trial based on VirnetX's closing argument.

(4) *Mr. Weinstein's testimony*

Apple also asks the Court to grant a new trial because Mr. Weinstein's testimony should have been excluded. Docket No. 775 at 39. As discussed at length above and in previous orders, Mr. Weinstein's methodology withstands Apple's *Daubert* challenge, and Apple is not entitled to a new trial on this basis.

(5) *The exclusion of Patent Office ("PTO") proceedings*

Apple contends that it is entitled to a new trial because the Court excluded evidence from parallel PTO proceedings. Docket No. 775 at 39. Apple suggests that the fact that the PTO has issued final written decisions finding each claim unpatentable over the prior art is relevant to damages. *Id*.

The Court is not persuaded that exclusion of the PTO proceedings warrants a new trial. VirnetX's appeals of those proceedings are ongoing, and none of the asserted claims has been cancelled. It is particularly unclear what probative value the PTO proceedings have in light of the fact that invalidity is not an issue in this case.

To the extent Apple argues the decisions are relevant to damages, the relevance of the decisions is minimal because a number of the "decisions" cited in Apple's offer of proof[2] on PTO proceedings were issued *after* the parties' alleged hypothetical negotiation date of September 2013. *Compare* Docket No. 721 at 18 ("If infringement is found, the date of the hypothetical negotiation would be September 2013, when the redesigned versions of VPN on Demand and FaceTime were released."), *with* Docket No. 692 (Apple's offer of proof).

Apple suggests that the evidence would have been relevant to the utility and advantages of the patented property over old modes or devices. *Id*. But, contrary to its assertions, Apple was not *precluded* from introducing evidence that the claimed invention "has no utility or advantages over old modes or devices." *Id*. The Court only prohibited the use of the PTO proceedings, and Apple was free to present whatever evidence relating to *Georgia-Pacific* factors 9 and 10 it so chose. Apple is not entitled to a new trial on this basis.

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Having considered each of Apple's arguments in its motion for judgment as a matter of law and a new trial of noninfringement, the Court concludes that Apple's motion should be **DENIED**.

II. VIRNETX'S MOTION FOR ENTRY OF JUDGMENT AND EQUITABLE AND STATUTORY RELIEF (DOCKET NO. 774)

In its motion for post-trial relief, VirnetX seeks (1) enhanced damages; (2) attorneys' fees pursuant to 35 U.S.C. § 285; (3) supplemental damages; (4) an injunction or sunset royalty; (5) pre-judgment interest; and (6) post-judgment interest and costs. The Court addresses each request in turn.

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[2] The Court notes that, in its offer of proof on PTO proceedings, Apple only "submits that the evidence is relevant and admissible because it tends to show . . . VirnetX's damages demand is excessive and unjustified given that the asserted claims have been held unpatentable, subject only to Federal Circuit appeal." Docket No. 692 at 21–22.

A. Enhanced damages

The jury returned a verdict finding Apple's infringement willful. Docket No. 729. VirnetX argues that a 100 percent enhancement of the jury's verdict is warranted under the *Read* factors. The Court disagrees. As detailed below, the Court concludes that enhancement is inappropriate under the totality of the circumstances.

A court may enhance the jury's damages award by up to three times. 35 U.S.C. § 284. "The paramount determination in deciding enhancement and the amount thereof is the egregiousness of the defendant's conduct based on all the facts and circumstances." *Read Corp. v. Portec Inc.*, 970 F.2d 816 (Fed. Cir. 1992). When deciding how much to award in enhanced damages, district courts often apply the non-exclusive factors articulated in *Read....*" *Georgetown Rail Equip. Co. v. Holland L.P.*, 867 F.3d 1229, 1244–45 (Fed. Cir. 2017). The non-exclusive *Read* factors used to evaluate whether to enhance damages—and the amount of any enhancement—include the following: (1) whether the infringer deliberately copied the ideas of another; (2) whether the infringer investigated the scope of the patent and formed a good-faith belief that it was invalid or that it was not infringed; (3) the infringer's behavior as a party to the litigation; (4) the defendant's size and financial condition; (5) the closeness of the case; (6) the duration of the defendant's misconduct; (7) remedial action by the defendant; (8) the defendant's motivation for harm; and (9) whether the defendant attempted to conceal its misconduct. *Read*, 970 F.2d at 827.

An award need not rest on any particular factor, and not all relevant factors need to weigh in favor of an enhanced award. *See SRI Int'l, Inc. v. Advanced Tech. Labs., Inc.*, 127 F.3d 1462, 1469 (Fed. Cir. 1997). While the *Read* factors are helpful to the Court's exercise of its discretion, an analysis focused on "egregious infringement behavior" is the touchstone for determining an

award of enhanced damages rather than a more rigid, mechanical assessment. *See Finjan, Inc. v. Blue Coat Sys., Inc.*, No. 13-cv-3999, 2016 WL 3880774, at *16 (N.D. Cal. July 18, 2016).

(1) *Copying*

The first *Read* factor is "whether the infringer deliberately copied the ideas or design of another." As to this factor, VirnetX argues that Apple copied (or was reckless to whether it copied) VirnetX's inventive methods and systems. Docket No. 774 at 9. Apple contests that it copied any of VirnetX's ideas or designs and argues that its engineers made a good-faith effort to redesign its features to avoid further infringement. Docket No. 778 at 6. In its reply, VirnetX maintains that the copying factor is met here because Apple went "back to including already-adjudicated infringing components in its products." Docket No. 782 at 4.

While substantial evidence was presented at trial supporting both sides' view of how the redesigned products worked, the jury presumably found the facts to be more consistent with VirnetX's characterization than Apple's. By replicating the operation and functionality of its products that were already adjudicated to infringe, Apple "copied" the ideas or designs of VirnetX. *See PPC Broadband, Inc. v. Corning Optical Commc'ns RF, LLC*, No. 511CV761GLSDEP, 2016 WL 6537977, at *6 (N.D.N.Y. Nov. 3, 2016), appeal dismissed, No. 16-4106, 2016 WL 10655596 (2d Cir. Dec. 12, 2016). After the 417 product functionality was adjudicated to infringe, Apple was at least deliberately reckless towards copying VirnetX's ideas when it reimplemented those features in the redesigns. *Barry v. Medtronic, Inc.*, 250 F. Supp. 3d 107, 114 (E.D. Tex. 2017). Accordingly, the "copying" factor favors enhancement.

(2) *Investigation and good-faith belief*

Next, the Court considers "whether the infringer, when he knew of the other's patent protection, investigated the scope of the patent and formed a good-faith belief that it was invalid

or that it was not infringed." As the Court explained in the 417 action, "Apple contends that its good-faith belief in its infringement positions and its post-grant challenges to the patents' validity mitigate against an award of enhanced damages, but after the jury's verdict finding the claims infringed and valid, its reliance on these beliefs was no longer reasonable." 417 action, Docket No. 1079 at 47 (citing *Mondis Tech. Ltd. v. Chimei InnoLux Corp.*, 822 F. Supp. 2d 639, 652 (E.D. Tex. 2011), *aff'd sub nom. Mondis Tech. Ltd. v. InnoLux Corp.*, 530 F. App'x 959 (Fed. Cir. 2013) (enhancing damages for post-verdict infringement despite defendant's argument that it had a good-faith belief in its appellate positions); *VirnetX*, 767 F.3d at 1324 (noting that actions by the PTO are of limited value when attempting to establish a good faith belief of invalidity)).

With respect to infringement and redesigned VOD, although the jury did not agree, Apple had at least a good-faith belief that the redesign did not infringe based on its location-based reconfiguration. As to FaceTime, the Court notes that Apple raised a noninfringement argument regarding the "indication" term for which there was substantial evidence. The Court cannot conclude on this record that Apple's noninfringement positions were not in good faith.

Apple also obtained an written opinion of counsel from Mr. Lee Van Pelt, but the Court assigns his opinion little weight because it was obtained after the redesigns were released. Apple claimed to have obtained an earlier, "oral" opinion from Mr. Van Pelt, but the witness alleged to have received the oral opinion stated that he did not "have personal knowledge of a verbal opinion from Mr. Pelt." 4/11 PM Tr. at 28:24–29:2. The Court likewise assigns this unsubstantiated opinion little weight.

On balance, Apple did not rely on a timely opinion of counsel. To the extent it had a good-faith belief in invalidity based on the PTO proceedings, the weight of such belief is minimized by the fact that invalidity was no longer an issue in this case. But the Court is persuaded that Apple

maintained a good faith belief that its redesigns did not infringe. Indeed, unlike in the 417 retrial,[3] Apple maintained reasonable noninfringement positions for both products at issue in the case. Considering the totality of the circumstances, this factor is neutral.

(3) *Infringer's behavior as a party to the litigation*

For the next *Read* factor, the Court considers Apple's "behavior as a party to the litigation." The Court is not persuaded that Apple committed litigation misconduct in this trial. The Court agrees with VirnetX that Apple violated a ruling *in limine* by cross-examining VirnetX's CEO, Mr. Kendall Larsen, on his divorce. 4/4 PM Tr. at 168:20–168:1. The Court also notes that Apple's expert, Dr. Blaze, implied to the jury that the construction of "domain name service system" incorporated the construction of "domain name service," which the Court remedied by including a corrective instruction in its jury charge. When the Court considers these actions independently of the 417 action and in the context of this case alone, the Court is not persuaded that Apple's behavior as a party to the litigation supports enhancement, and this factor weighs neutral.

(4) *Size and financial condition*

Read factor 4, the infringer's size and financial condition, weighs in favor of enhancement. This factor can weigh against enhancement when the infringer is in such perilous financial condition that an award of enhanced damages might put it out of business. *Idenix Pharm. LLC v. Gilead Scis., Inc.*, 271 F. Supp. 3d 694, 701 (D. Del. 2017) (citing *Virginia Panel Corp. v. Mac Panel Co.*, 887 F.Supp. 880, 885 (W.D. Va. 1995), *aff'd,* 133 F.3d 860 (Fed. Cir. 1997)). In cases

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[3] After the first trial in the 417 action, the Federal Circuit affirmed the finding that none of the asserted claims were invalid and that VPN on Demand infringed. *VirnetX, Inc*., 767 F.3d at 1313–14 ("For the reasons that follow, we affirm the jury's findings that none of the asserted claims are invalid and that many of the asserted claims of the ′135 and ′151 patents are infringed by Apple's VPN On *1314 Demand product."). Accordingly, for the retrial, infringement by VPN on Demand was not submitted to the jury.

where enhanced damages would not unduly prejudice the defendant's noninfringing business, it can weigh in favor of enhancement. *See, e.g., Creative Internet Advert. Corp. v. Yahoo! Inc.*, 689 F. Supp. 2d 858, 866 (E.D. Tex. 2010); *Ericsson Inc. v. TCL Commc'n Tech. Holdings, Ltd.*, No. 2:15-CV-00011-RSP, 2018 WL 2149736, at *11 (E.D. Tex. May 10, 2018).

As the Court noted in the 417 action, "it is undisputed that Apple is one of the largest and most financially successful companies in the world." 417 action, Docket No. 1079 at 45. *See also Arctic Cat Inc. v. Bombardier Recreational Prod., Inc.*, 198 F. Supp. 3d 1343, 1352 (S.D. Fla. 2016), *aff'd*, 876 F.3d 1350 (Fed. Cir. 2017) ("Where, as here, BRP is a multi-billion dollar enterprise and the market leader—due in significant part to sales of products found to willfully infringe Arctic Cat's patents—enhancement of damages is particularly warranted."). And the Court cannot conclude "that a trebled award would "unduly prejudice [Apple's] non-infringing business." *Georgetown Rail Equip. Co. v. Holland L.P.*, No. 6:13-CV-366, 2016 WL 3346084, at *19 (E.D. Tex. June 16, 2016), *aff'd*, 867 F.3d 1229 (Fed. Cir. 2017).

(5) *Closeness of the case*

The next *Read* factor, "closeness of the case," disfavors enhancement. In ruling on Apple's post-trial motions, the Court determined that the verdict was supported by substantial evidence. But the Court is also persuaded that Apple presented reasoned and justified defenses. *Apple Inc. v. Samsung Elecs. Co.*, 258 F. Supp. 3d 1013, 1033 (N.D. Cal. 2017) (citing *Finjan*, 2016 WL 3880774 at *17; *Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc.*, No. 09-CV-05235-MMC, 2017 WL 130236, at *4 (N.D. Cal. Jan. 13, 2017)). A testament to the closeness of the case is the fact that the jury deliberated for over five hours between the two phases of the case.

(6) *Duration of misconduct and* **(7)** *remedial action*

Factors 6 and 7—the duration of the misconduct and the remedial action taken by the infringer—weigh against enhancement. Apple took remedial action quickly after the 417 verdict to redesign its products, collaborating with engineers, management, and its legal team. *See, e.g.,* 4/6/18 AM Tr. at 68:24–69:19; 4/11 PM Tr. at 6:24–8:21, 13:14–15:21. The Court is not persuaded that Apple's remedial action was not in good faith. Although ultimately the jury found that the redesign was infringing, the Court declines to penalize Apple for shifting course and attempting to make changes in light of the 417 verdict.

(8) *Motion for harm*

Similarly, there is no evidence of a "motivation for harm" that would support enhancement. VirnetX asserts that Apple's release of a redesign and participation in post-grant review at the Patent Office is evidence of its "motivation to harm." Docket No. 774 at 24–25. However, VirnetX points to no evidence that Apple's decision to release redesigns was anything other than profit-driven, let alone motivated to harm VirnetX. In the absence of any supporting authority, the Court also declines to infer motivation to harm a patent owner from participation in post-grant proceedings. Accordingly, this factor is neutral. *See, e.g., Georgetown Rail*, No. 6:13-CV-366, 2016 WL 3346084, at *20 (finding this factor neutral when there was "nothing to suggest that Holland acted out of spite or ill-will toward Georgetown or for any reason other than a desire to capture a piece of the market"); *Internet Machines*, 2013 WL 4056282, at *20; *Spectralytics, Inc. v. Cordis Corp.*, 834 F. Supp. 2d 920, 924 (D. Minn. 2011), *aff'd*, 485 F. App'x 437 (Fed. Cir. 2012).

(9) *Concealment*

Finally, the Court considers the ninth *Read* factor, whether Apple concealed its infringement. As the Court described in Section I.A.(1), there are three relevant versions of FaceTime in this case. First, there is the adjudged-infringing version of FaceTime that was at issue in the 417 action. A second version—that the parties agree did not infringe—was implemented in April 2013 and relayed 100 percent of calls. The jury determined the third version of FaceTime, at issue in this case, infringed each of the asserted claims.

The third version of FaceTime was released on September 18, 2013, the day iOS 7 was released. 4/5 PM Tr. at 216:14–17 (Thirumalai); *id.* at 250:13–18. On that date, Apple stopped relaying 100 percent of FaceTime calls. Apple's corporate representative and fact witness for FaceTime, Mr. Thirumalai, was instrumental in enacting the 100 percent relay non-infringing alternative in April 2013. He was also a member of the team studying ways to reduce relay usage. Mr. Thirumalai made a server change in May of 2013 facilitating peer-to-peer calls. *Id.* at 216:18–218:6; 214:25–215:3; 247:23–248:16. Despite this, however, Apple misrepresented to VirnetX's counsel during two different depositions—both occurring long after Apple had stopped relaying 100 percent of FaceTime calls—that Apple had never made the change back to supporting direct peer-to-peer FaceTime calls. 4/6 AM Tr. at 25:14–16 (Thirumalai) ("Q: On May 15, 2014, did you tell us that 100 percent of FaceTime calls were being relayed? A: Yes."); *id.* at 29:4–14; *cf.* 4/11 AM Tr. at 121:4–122:5 (Stauffer) (testifying that, as of 2014, it was *not true* that Apple had relayed 100 percent of FaceTime calls since April 2013).

The evidence clearly supports a finding that Apple attempted to conceal its infringement, and this factor weighs in favor of enhancement.

* * *

Having considered each *Read* factor, the Court concludes that enhancement is inappropriate. In favor of enhancement are the facts that Apple is a large, successful company, that Apple "copied" VirnetX's ideas in a redesign and that an Apple engineer and corporate witness misled VirnetX in depositions about key infringement facts. The Court should not be interpreted as condoning such conduct. At the same time, however, this case was close, the misconduct brief and the remediation effort significant.

Aside from the *Read* factors, the Court also considers the size of the jury verdict. Enhanced damages inherently deter future, similar conduct. *Affinity Labs of Texas, LLC v. BMW N. Am., LLC*, 783 F. Supp. 2d 891, 899 (E.D. Tex. 2011) ("General deterrence of infringing activity is also a factor to be considered."). The jury's damages number is supported by the evidence in this case. But the Court is not persuaded that any enhancement of the verdict would lead to any additional deterrence of future conduct.

"Awards of enhanced damages under the Patent Act over the past 180 years establish that they are not to be meted out in a typical infringement case, but are instead designed as a 'punitive' or 'vindictive' sanction for egregious infringement behavior. The sort of conduct warranting enhanced damages has been variously described [by the Supreme Court] as willful, wanton, malicious, bad-faith, deliberate, consciously wrongful, flagrant, or—indeed—characteristic of a pirate." *Halo*, 136 S. Ct. at 1932. In light of its full consideration of the totality of the circumstances, the Court cannot conclude that Apple's conduct mandates enhancement. *See id*. at 1933 ("Section 284 allows district courts to punish the full range of culpable behavior. Yet none of this is to say that enhanced damages must follow a finding of egregious misconduct."). Accordingly, the Court exercises its discretion to deny VirnetX's request for enhanced damages.

B. Attorneys' fees pursuant to 35 U.S.C. § 285

VirnetX asks the Court to award it attorneys' fees for "the reasons related to the closeness of the case and litigation conduct under the *Read* factors." Docket No. 774 at 30. As the Court has concluded above, Apple's behavior in this case did not amount to litigation misconduct, and the substantive strength of Apple's positions do not stand out from others. Accordingly, VirnetX's request for attorneys' fees is **DENIED**.

C. Supplemental damages

VirnetX requests supplemental damages at the jury's implied royalty rate to account for units not included in the jury verdict. Docket No. 774 at 33–34. Apple requests the Court stay any accounting of these units until the resolution of all appeals in this case, in the 417 action and of the PTO proceedings. Docket No. 778 at 27. According to Apple, the appeals could moot damages awards in this action. *Id*.

Because Apple does not oppose VirnetX's request for supplemental damages at the implied royalty rate, the Court **GRANTS** VirnetX's motion for supplemental damages. A stay of accounting is not warranted in this case, and Apple is directed to provide VirnetX an accounting of post-verdict, pre-judgment infringing units within **thirty (30) days**.

D. Injunction or sunset royalty

VirnetX seeks a permanent injunction. Docket No. 774 at 35–42. If the Court declines to enter an injunction, VirnetX alternatively seeks a sunset royalty. *Id*.

(1) *Injunction*

"According to well-established principles of equity, a plaintiff seeking a permanent injunction must satisfy a four-factor test before a court may grant such relief." *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 391 (2006). "A plaintiff must demonstrate: (1) that it has

suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction." *Id*. Because the Court concludes that VirnetX failed to demonstrate irreparable injury, the Court will deny VirnetX's request for an injunction.

As irreparable injury, VirnetX argues Apple's infringement has prevented VirnetX from capitalizing on its own product, the Gabriel application. According to VirnetX, the Gabriel product—for which it charges a fee—is forced to compete against Apple's infringing products that include VirnetX's technology at no additional cost. *Id*. at 35–36. VirnetX contends that this harm is connected to the patented features and demand for the infringing product because Apple "must use VirnetX's patented technology in order to offer its Facetime and the infringing mode of VPN on Demand." *Id*. at 36. VirnetX also argues that the prevalence of Apple's products in the marketplace have harmed VirnetX's reputation as an innovator. *Id*. With respect to whether monetary damages can adequately compensate VirnetX, VirnetX claims that "an ongoing royalty fails to account for other contractual terms that VirnetX could otherwise negotiate with Apple, such as terms prohibiting Apple from challenging the validity of the patents and terms constraining Apple's ability to contest whether royalties are owed for future products," and that "[n]o monetary remedy can compensate for these terms." *Id*. at 37–38. For balance of harms, VirnetX suggests that the jury's willfulness finding and the fact that "VirnetX's patented technology is critical to its business" tilts the equities towards VirnetX. *Id*. at 39. Finally, VirnetX maintains that an injunction promotes the public interest because "Apple's infringing products are not essential for public health or welfare." *Id*. at 39.

In 2013, Judge Davis considered similar arguments from VirnetX regarding an injunction and rejected them. *VirnetX Inc. v. Apple Inc.*, 925 F. Supp. 2d 816, 845 (E.D. Tex. 2013). The only operative fact that has changed since 2013 is that, now, VirnetX has released its Gabriel product.[4] The Court now considers whether the release of Gabriel justifies entry of an injunction.

VirnetX suggests that, now that Gabriel has been released, "VirnetX . . . directly competes with Apple for end-users of secure communication software with the patent-practicing features and continues to suffer competitive harm in the form of lost sales and reputational harm caused by Apple's distribution of the infringing features." Docket No. 774 at 34.

The Court is not persuaded that Gabriel competes with the infringing Apple products. Gabriel, unlike FaceTime or redesigned VOD, is a cross-platform application compatible with Apple, Android, Windows, and Linux devices. Docket No. 778-9. These non-Apple devices cover 50 percent of the U.S. smartphone market and nearly 80 percent of the U.S. computer operating system market. For the majority of Gabriel-compatible systems, Apple's products present no competition at all.

The Court also notes that VirnetX has entered into a license with another competitor: Skype. Skype has been downloaded over 1 billion times on Android (non-Apple) devices, 4/5 PM Tr. 162:1–163:2, whereas Gabriel has only been downloaded between 500 and 1,000 times on the Android platform. Docket Nos. 778-12, 778-25. VirnetX's decision to license a significant competitor who posed a major threat to its flagship product cautions against any finding of irreparable harm. *Nichia Corp. v. Everlight Ams., Inc.*, 855 F.3d 1328, 1343 (Fed. Cir. 2017).

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[4] The Court notes, however, that Judge Davis concluded that, even if Gabriel had been on the market, "Apple does not directly compete with VirnetX. Apple sells phones, not security software. Additionally, Apple's sale of cell phones has not restricted VirnetX's ability to market and sell its Gabriel technology to other tablet, cellphone or computer manufacturers. VirnetX's damages are limited to the loss of Apple as a customer." *VirnetX*, 925 F.Supp.2d at 846.

Even in markets where Apple products and Gabriel do compete, Gabriel functionality differs from FaceTime and redesigned VOD. VirnetX markets Gabriel as an "integrated set of secure applications including Mail, Messaging, File Sharing & Backup, Voice Calls and Video Calls." Docket No. 778-9. VirnetX markets the security of Gabriel to its small-to-medium business customers, seeking to appeal to companies that place a high value on security. Docket No. 778-14 at 17. FaceTime and VPN on Demand, however, do not offer mail, messaging, or file-sharing and back up, and Apple primarily serves the consumer market. *See, e.g.*, PX-1134–8; PX-1182–8; PX-1186–5.

The record amply demonstrates that VirnetX's Gabriel product and Apple's accused products do not compete. The only other irreparable harm VirnetX identifies is reputational harm. But the reputational harm VirnetX complains of—being deemed a "patent troll" in online publications—may occur regardless of whether the Court enters an injunction. Moreover, it is unclear that Apple's actions have led to these statements.

On this record, the Court concludes that VirnetX will not suffer irreparable harm absent an injunction, and VirnetX's request for an injunction is **DENIED**.

(2) *Sunset royalty*

In the alternative, VirnetX seeks an ongoing royalty. Apple asks this Court to deny an ongoing royalty only on the basis of its JMOL and new trial arguments, which the Court has already rejected. Docket No. 778 at 28.

The Federal Circuit has interpreted 35 U.S.C. § 283 to permit a court to award an ongoing royalty for patent infringement in lieu of an injunction. *Prism Techs. LLC v. Sprint Spectrum L.P.*, 849 F.3d 1360, 1377 (Fed. Cir. 2017). Ongoing royalties may be based on a post-judgment hypothetical negotiation using the Georgia–Pacific factors. *Arctic Cat Inc. v. Bombardier*

Recreational Prod. Inc., 876 F.3d 1350, 1370 (Fed. Cir. 2017). The amount of the ongoing royalty is "committed to the sound discretion of the district court" to be determined in accordance with principles of equity. *Amado v. Microsoft Corp.*, 517 F.3d 1353, 1364 n.2 (Fed. Cir. 2008).

At the outset, the Court determines that imposition of an ongoing royalty is an appropriate exercise of the Court's discretion in this case. *Whitserve, LLC v. Computer Packages, Inc.*, 694 F.3d 10, 35 (Fed. Cir. 2012). Here, it is clear from the verdict form that the jury awarded damages for past infringement. *See* Docket No. 723 at 4 ("What royalty do you find, by a preponderance of the evidence, would fairly and reasonably compensate VirnetX for any infringement that you have found"); *see also Whitserve,* 694 F.3d at 35 ("The jury was instructed to award 'damages,' which by definition covers only past harm."). Because the jury's verdict does not compensate VirnetX for future infringement, the Court will award an ongoing royalty. *Telcordia Techs., Inc. v. Cisco Sys., Inc.*, 612 F.3d 1365, 1379 (Fed. Cir. 2010).

The jury's implied royalty rate is $1.20, which is supported by substantial evidence. *See supra* Section II.B. From this starting point, the Court conducts a renewed analysis of a reasonable royalty based on a post-verdict hypothetical negotiation. *See Erfindergemeinschaft UroPep GbR v. Eli Lilly & Co.*, No. 2:15-cv-1202-WCB, 2017 WL 3034655, at *7 (E.D. Tex. July 18, 2017). The burden is on VirnetX to show that it is entitled to a royalty rate in excess of the rate initially determined by the jury. *Creative Internet Advertising Corp. v. Yahoo! Inc.*, 674 F. Supp. 2d 847, 855 (E.D. Tex. 2009).

"There is a fundamental difference . . . between a reasonable royalty for pre-verdict infringement and damages for post-verdict infringement." *Amado,* 517 F.3d. at 1361. "Prior to judgment, liability for infringement, as well as the validity of the patent, is uncertain, and damages are determined in the context of that uncertainty." *Id.* at 1362. Once a judgment of validity and

infringement has been entered, however, the calculus is markedly different because different economic factors are involved. *Id*. (citing *Paice LLC v. Toyota Motor Corp*., 504 F.3d 1293, 1315 (Fed. Cir. 2007)).

VirnetX asks the Court to enhance the ongoing royalty to $3.00 per unit based on the "totality of the circumstances . . . in combination with the changed post-judgment economic circumstances." Docket No. 782 at 14–15. The Court declines to enhance the verdict for willfulness for at least the reasons detailed in its analysis of enhanced damages. Importantly, VirnetX bears the burden to show that an enhanced royalty rate is appropriate, and its general statements about "changed circumstances" do not meet that burden. Accordingly, the Court will not enhance the ongoing royalty and **SETS** the ongoing royalty at the jury's implied rate of $1.20 per unit. Apple is **ORDERED** to provide an accounting of infringing units on a quarterly basis.

E. Pre-judgment interest

VirnetX seeks pre-judgment interest at the prime rate compounded annually, to be applied to the jury award beginning at the date of the hypothetical negotiation. Docket No. 774 at 43.

Apple asks the Court to withhold prejudgment interest because "the jury award was generous enough" and will compensate "VirnetX far beyond what the parties would have agreed to in September 2013." Docket No. 778 at 44–45. If any prejudgment interest is awarded, Apple requests that it be measured from February 4, 2016 because VirnetX "caused" delay by requesting consolidation and "forc[ing] deconsolidation and two retrials." *Id*. at 45.

Apple's argument against prejudgment interest was not raised in response to the 417 retrial. *See* Docket No. 1079 at 55–57. Regardless, however, the Court declines to assign responsibility for the lengthy timeline of this case to either party. The Court is not persuaded by Apple's

argument against prejudgment interest and **AWARDS** prejudgment interest to VirnetX at the prime rate, compounded annually, beginning at the date of the hypothetical negotiation.

F. Post-judgment interest and costs

VirnetX seeks post-judgment interest, which Apple opposes only insofar as "the Court has not yet ruled on the parties' post-trial motions, which may affect whether VirnetX is the prevailing party." Docket No. 778 at 45. Having resolved the parties' motions above, the Court **AWARDS** VirnetX post-judgment interest pursuant to 28 U.S.C. § 1961. Additionally, VirnetX is the prevailing party and is **AWARDED** costs pursuant to Federal Rule of Civil Procedure 54(d) and 28 U.S.C. §1920.

CONCLUSION

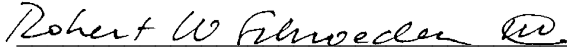As set forth above, the Court has ruled as follows:

- Apple's Omnibus Motion for Judgment as a Matter of Law under Rule 50(b) and for a New Trial (Docket No. 775) is **DENIED** in all respects; and

- VirnetX's Motion for Entry of Judgment and for Equitable and Statutory Relief (Docket No. 774) is **DENIED-IN-PART** and **GRANTED-IN-PART**.

Specifically, with respect to VirnetX's Motion, the Court has ruled as follows:

- VirnetX's request for enhanced damages is **DENIED**;

- VirnetX's request for attorneys' fees is **DENIED**;

- VirnetX's request for supplemental damages is **GRANTED**;

- VirnetX's request for an injunction is **DENIED**;

- VirnetX's request for a sunset royalty is **GRANTED** and the royalty rate is set at $1.20;

- VirnetX's request for pre-judgment and post-judgment interest are **GRANTED**; and

- VirnetX's request for costs is **GRANTED**.

In light of the above, Apple's Motions for Judgment as a Matter of Law Pursuant to Rule

50(a) (Docket Nos. 713, 714 and 718) are **DENIED AS MOOT**. Final judgment will be entered

in accordance with this order.

So ORDERED and SIGNED this 30th day of August, 2018.

ROBERT W. SCHROEDER III
UNITED STATES DISTRICT JUDGE

Appx118

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

VIRNETX INC., LEIDOS, INC.,	§ § §	
Plaintiffs,	§	CIVIL ACTION NO. 6:12-CV-00855-RWS
v.	§ §	LEAD CASE
APPLE INC.,	§ § §	
Defendant.	§	

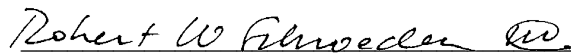|		
VIRNETX INC.,	§ §	
Plaintiff,	§ §	CIVIL ACTION NO. 6:11-CV-00563-RWS
v.	§ §	MEMBER CASE
APPLE INC.,	§ §	
Defendant.	§ §	

FINAL JUDGMENT

On this date, the Court entered its Memorandum Opinion and Order denying Defendant Apple Inc.'s Omnibus Motion for Judgment as a Matter of Law under Rule 50(b) and for a New Trial (Docket No. 775) and denying-in-part and granting-in-part VirnetX's Motion for Entry of Judgment and for Equitable and Statutory Relief (Docket No. 774)

A decision having been duly rendered as to all claims and consistent with the Court's Memorandum Opinion and Order, the Court hereby enters **FINAL JUDGMENT**.

The Clerk of the Court is directed to close both the lead and member case.

So ORDERED and SIGNED this 30th day of August, 2018.

Robert W Schroeder III
ROBERT W. SCHROEDER III
UNITED STATES DISTRICT JUDGE

Appx119