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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.
Petitioner

v.

VIRNETX INC.
Patent Owner

Case IPR2013-00397
Patent 7,921,211

**Patent Owner's Preliminary Response
to Petition for *Inter Partes* Review
of U.S. Patent No. 7,921,211**

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I. Introduction

Patent Owner VirnetX Inc. (“VirnetX” or “Patent Owner”) respectfully submits this Preliminary Response in accordance with 35 U.S.C. § 313 and 37 C.F.R. § 42.107, responding to the Petition for *Inter Partes* Review (Paper No. 1, the “Petition”) filed by Apple Inc. (“Apple”).

This Petition is one of seven *inter partes* reviews requested by Apple against VirnetX’s patents. In these *inter partes* reviews, Apple seeks its fourth opportunity to challenge the validity of U.S. Patent No. 7,921,211 (“the ’211 patent”). Apple’s first opportunity arose in litigation, where Apple and Cisco Systems, Inc. (“Cisco”) each challenged the validity of the ’211 patent in the Eastern District of Texas. The Apple and Cisco cases were tried before separate juries, and both juries upheld the validity of the asserted ’211 patent claims. (Ex. 2002, Jury Verdict Form Against Apple in *VirnetX, Inc. v. Apple Inc.*, Case No. 6:10-CV-417 (E.D. Tex. Nov. 6, 2012) (“the ’417 Litigation”); Ex. 2006, Jury Verdict Form as to Cisco in the ’417 Litigation (E.D. Tex. Mar. 14, 2013).) The court later entered final judgments upholding the validity of the ’211 patent. (Ex. 2007, Final Judgment Against Apple in the ’417 Litigation (E.D. Tex. Feb. 28, 2013); Ex. 2008, Final Judgment as to Cisco in the ’417 Litigation (E.D. Tex. Mar. 19, 2013).)

Apple mounted its second validity challenge by requesting *inter partes* reexamination of the '211 patent during the '417 Litigation. That reexamination (Control No. 95/001,789) is ongoing.

Despite having a validity challenge pending before the Office, Apple attempts to initiate its third and fourth validity challenges to the '211 patent by filing two *inter partes* review petitions against the '211 patent (this Petition and the petition in Case No. IPR2013-00398, “the '398 Petition”). But, as explained below, institution of these proceedings is statutorily barred, and there is no reason to give Apple these additional opportunities.

There are also two other ongoing proceedings at the Office against the '211 patent. One is an *inter partes* reexamination filed by Cisco (Control No. 95/001,856). The second is an *inter partes* review requested by New Bay Capital, LLC (“New Bay”) (Case No. IPR2013-00378). As a result, there are now five post-grant challenges before the Office concerning the '211 patent: Apple’s and Cisco’s *inter partes* reexaminations, New Bay’s *inter partes* review petition, and Apple’s *inter partes* review petitions. These proceedings are largely duplicative of one another, and instituting Apple’s *inter partes* reviews will only serve to duplicate efforts already undertaken in litigation and in pending reexamination of the '211 patent.

Apple's petitions are also defective in a number of ways described below. Accordingly, the Board should not institute these proceedings.

II. The Petition Fails to Meet the Requirements for Instituting an *Inter Partes* Review

The Board need not waste its resources on Apple's latest attempts to challenge the '211 patent, because the Petition does not comply with the requirements for instituting *inter partes* review. Each ground will be discussed in more detail in the sections below, but in short, one defect that disposes of the entire Petition is that it is time-barred under 35 U.S.C. § 315(b). The Petition was filed more than one year after Apple was served with a complaint alleging infringement of the '211 patent. Accordingly, the Petition should be denied based on the plain language of the statute, the Board's precedent, and the relevant legislative history.

Apple also violates 37 C.F.R. § 42.104(b)(4) because the Petition fails to "specify where each element of the claim is found in the prior art patents or printed publications relied upon." 37 C.F.R. § 42.104(b)(4). It cites almost exclusively to a voluminous declaration (Ex. 1003) accompanying the Petition and not to the *Aventail* or *Beser* references themselves. Moreover, Apple fails to identify the features of *Aventail* and *Beser* that allegedly correspond to each '211 patent claim feature. Instead, Apple broadly generalizes the disclosure of those references without discussing specific aspects of them.

Apple also proposes rejections that are redundant of one another and of the proposed rejections in Apple's other *inter partes* review petition for the '211 patent (the '398 Petition). Apple does not explain any differences between its parallel proposed rejections, or explain how any particular proposed rejection improves on another in any way. Addressing these redundant grounds would significantly burden the Board and the Patent Owner, and it would cause unnecessary delay of the *inter partes* review proceedings, all without any added benefit. *Liberty Mut. Ins. Co. v. Progressive Cas. Ins. Co.*, CBM2012-00003 (Oct. 25, 2012) Paper No. 7.

A. The Petition Must Be Denied Under 35 U.S.C. § 315(b)

The plain language of 35 U.S.C. § 315(b) compels dismissal of the Petition. The statute prohibits *inter partes* review of a patent based on a petition filed more than one year after the petitioner has been served with "a complaint" alleging infringement of the patent. It is undisputed that VirnetX served Apple with "a complaint" alleging infringement of the '211 patent more than one year before the Petition was filed. Apple asks the Board to ignore this fact and instead focus on a later-served complaint, which Apple contends resets the one-year time period for filing a petition for *inter partes* review. The Board has already addressed this same issue in another proceeding, where it rejected Apple's view and adopted VirnetX's interpretation of § 315(b). *Universal Remote Control, Inc. v. Universal*

Elecs., Inc., IPR2013-00168 (Aug. 26, 2013) Paper No. 9. As discussed below, the Board's and VirnetX's interpretation is also supported by the relevant legislative history.

Apple's argument that dismissing the Petition would "unfairly foreclose use of the IPR system" also rings hollow given that Apple has repeatedly availed itself of the district court and the Office to challenge the '211 patent, including in a still-pending *inter partes* reexamination proceeding.¹

1. Procedural History Relevant to § 315(b)

VirnetX served² its first complaint against Apple regarding the '211 patent on April 5, 2011, in the '417 Litigation, alleging infringement of at least claims 1, 2, 5, 6, 14-23, 26-28, 33-47, 49-52, and 57-60 of the '211 patent ("the April 2011 Complaint"). (Ex. 2005, VirnetX Inc.'s Second Amended Complaint in the '417 Litigation (E.D. Tex. Apr. 5, 2011).) As explained above, in the litigation involving this complaint, Apple challenged the validity of the '211 patent. It did

¹ Apple's Petition should also not be joined with New Bay's, if instituted, for the reasons discussed in VirnetX's Opposition to Apple's Motion for Joinder, filed August 28, 2013.

² The April 2011 Complaint was electronically served on Apple via the Case Management/Electronic Case Files (CM/ECF) system. (See Ex. 2005 at 40, Plaintiff VirnetX's Second Amended Complaint.)

not succeed. A jury upheld the validity of the asserted claims, and the district court entered judgment finding those claims valid. (Exs. 2002, 2007.)

After obtaining the favorable jury verdict, VirnetX served Apple with another complaint (Ex. 1050) on December 31, 2012 (“the 2012 Complaint”). (Ex. 2010 at 2, Proof of Service of VirnetX Inc.’s Complaint in *VirnetX Inc. v. Apple Inc.*, No. 6:12-CV-00855 (E.D. Tex. Dec. 31, 2012).) The 2012 Complaint asserts the same ’211 patent claims as asserted in the April 2011 Complaint, but it alleges infringement by several Apple products that were not included in the earlier complaint. (Ex. 1050 at 4-11.)

Concurrent with the above litigations, Apple has also challenged the validity of the ’211 patent in the Office by initiating an *inter partes* reexamination Control No. 95/001,789, which remains pending. Although Apple has availed itself of several opportunities to challenge the validity of the ’211 patent, it now seeks two more opportunities by filing the Petition at issue here and a separate petition for *inter partes* review in Case No. IPR2013-00398. These two petitions were filed in July 2013, long after Apple was first served with a complaint alleging infringement of the ’211 patent.

2. The Plain Meaning of § 315(b) and the Board’s Precedent Bar the Petition

Under 35 U.S.C. § 315(b), “[a]n *inter partes* review may not be instituted if the petition requesting the proceeding is filed more than 1 year after the date on

which the petitioner, real party in interest, or privy of the petitioner is served with a complaint alleging infringement of the patent.” 35 U.S.C. § 315(b) (emphasis added). The language “a complaint” is not restrictive, and Apple agrees that it means “any complaint.” (Petition at 2.) Thus, the directive of § 315(b) is clear: if a petition is filed more than one year after the petitioner is served with any complaint, *inter partes* review may not be instituted. Here, Apple filed its Petition in July 2013, more than one year after it was served with the April 2011 Complaint. Under the plain language of § 315(b), therefore, an *inter partes* review may not be instituted and Apple’s Petition must be dismissed.

Apple contends that VirnetX’s service of the later 2012 Complaint resets the clock for purposes of § 315(b), making its Petition timely. (*See id.*) Apple’s proposed statutory construction, however, turns § 315(b) on its head. According to Apple, “a petition filed within 1 year of the date any complaint alleging infringement of the patent is served on a petitioner is timely” (*Id.*, emphases added.) But § 315(b) does not permissively define when a petition “is timely.” Instead, it restrictively prohibits untimely petitions, stating that an *inter partes* review “may not be instituted” if the petition is “filed more than 1 year after” the petitioner has been served with a complaint alleging infringement. *See* 35 U.S.C. § 315(b) (emphasis added). Apple’s attempt to rewrite § 315(b)’s statutory bar

into a permissive, standing-creating provision is contrary to the statute’s plain language and structure.

Apple also argues that “§ 315(b) does not specify a one-year deadline that runs from the date of the first complaint served on a petitioner.” (Petition at 2, emphasis added.) But the statute need not do so because it specifies that the one-year deadline runs from service of “a complaint,” i.e., any complaint. Apple’s proposed construction—i.e., the one-year period is reset each time a patent owner serves a complaint—would require rewriting § 315(b) to replace “a complaint” with “the most recent complaint.” This is not what the statute says, and Apple cannot rewrite it to say so.

Apple’s argument also conflicts with the Board’s precedent construing § 315(b). In *Universal Remote Control*, IPR2013-00168 Paper No. 9, the Board considered whether the one-year bar under § 315(b) would be reset if a second infringement complaint was served by the patent owner on the petitioner. The first complaint was served in 2001 while the second complaint was served in 2012. *Id.* at 3. Although the second complaint was served less than 12 months before the petitioner filed its petition for *inter partes* review, the first complaint was not. *Id.* The Board rejected the petition as time-barred under § 315(b). *Id.* at 4. In particular, the Board disagreed that “the one-year grace period applies only to the last of a chain of multiple lawsuits or that the filing of a later lawsuit renders the

service of a complaint in an earlier lawsuit to be a nullity as Petitioner argues.” *Id.* Here, Apple’s request that the Board consider only the 2012 Complaint, and ignore the April 2011 Complaint, is directly contrary to the Board’s decision in *Universal Remote Control*.

3. The Legislative History Confirms that the Petition Is Barred

Apple also asserts that resetting the one-year period with each new complaint would be consistent with Congress’s design for the AIA. Because the plain language of the statute is clear, however, it is unnecessary to rely on legislative history or other extrinsic evidence to show congressional intent. *Conn. Nat’l Bank v. Germain*, 503 U.S. 249, 253-54 (1992) (“We have stated time and again that courts must presume that a legislature says in a statute what it means and means in a statute what it says there. When the words of a statute are unambiguous, then, this first canon is also the last: ‘judicial inquiry is complete.’” (citations omitted)).

To the extent the Board considers the legislative history, it supports VirnetX’s interpretation, not Apple’s. When adopting the one-year bar in § 315(b) instead of a proposed six-month deadline, Congress made clear that “it is important that the section 315(b) deadline afford defendants a reasonable opportunity to identify and understand the patent claims that are relevant to the litigation. It is thus appropriate to extend the section 315(b) deadline to one year.” (Ex. 2011, 157

Cong. Rec. S5429 (daily ed. Sept. 8, 2011) (statement of Sen. Kyl) (emphasis added).)

Thus, Congress intended the one-year period to allow defendants a reasonable opportunity to identify and understand the relevant patent claims. Here, Apple has already litigated claims of the '211 patent to a verdict based on the April 2011 Complaint, and the 2012 Complaint involves those same '211 patent claims. In addition, Apple filed *inter partes* reexaminations on all claims of the '211 patent by October 2011. Apple cannot claim that it needed until its 2013 petition filing date to identify and understand the relevant claims of the '211 patent.

Apple's arguments also contravene Congress's intent. Congress sought to avoid an open-ended process in which a petitioner could harass a patent owner with serial challenges. Congress noted that "[t]he inter partes proceeding in H.R. 1249 has been carefully written to balance the need to encourage its use while at the same time preventing the serial harassment of patent holders." (Ex. 2003 at 72, Meeting of the H. Comm. on Judiciary, Transcript of Markup of H.R. 1249 (Apr. 14, 2011) (statement of Judiciary Committee Chairman Lamar Smith).) Congress was also mindful of the "enhanced estoppels" built into the new statute, and determined that one year from the date of service of a complaint for infringement was sufficient for a defendant to determine whether to seek an

inter partes review. (See Ex. 2011, 157 Cong. Rec. S5429 (daily ed. Sept. 8, 2011) (statement of Sen. Kyl).)

Nothing in the legislative history of § 315(b) suggests that Congress intended to reset the one-year clock every time a patent owner served a defendant with a new complaint involving the same patent. To the contrary, Congress wanted to provide a reasonable, but limited, time in which a defendant could elect to initiate an *inter partes* review proceeding after being accused of infringement. Apple's more expansive view of § 315(b) conflicts with congressional intent.

4. Denying the Petition Is Not Unjust

Apple also argues that “reading § 315(b) to foreclose [these] petition[s] based on the August 2010 complaint³ would be particularly unjust in this case” because *inter partes* review proceedings were unavailable prior to September 16, 2012. (Petition at 3.) Apple's cries of injustice lack merit because Apple has, and continues to avail itself of, multiple avenues to challenge the '211 patent, including

³ Apple's reference here to a complaint VirnetX served in August 2010 is incorrect. That complaint alleged infringement against Apple of U.S. Patent Nos. 6,502,135 (“the '135 patent”) and 7,490,151 (“the '151 patent”). In April 2011, VirnetX amended the complaint to allege infringement against Apple of the '211 patent. (Compare Ex. 2001, VirnetX's Original Complaint in the '417 Litigation (E.D. Tex. Aug. 11, 2010), with Ex. 2005.)

those in district court and in pending *inter partes* reexamination. Given its ongoing *inter partes* reexamination—the pre-AIA counterpart to *inter partes* review—Apple cannot claim that dismissing its Petition would be unjust or leave it without recourse.

B. The Petition Fails to Comply with 37 C.F.R. § 42.104(b)(4)

Apple’s Petition is also defective for reasons apart from the time bar. A petition for *inter partes* review “must specify where each element of the claim is found in the prior art patents or printed publications relied upon.” 37 C.F.R. § 42.104(b)(4). Apple’s Petition fails to satisfy this requirement. Far from identifying where claim elements are found in the asserted prior art, the Petition almost never cites the asserted references. Instead, the Petition discusses almost exclusively its accompanying declaration (Ex. 1003). This voluminous body of declarant testimony serves to obscure rather than “specify” the grounds of invalidity asserted in the Petition.

Further obscuring the grounds of invalidity, the proposed rejections improperly rely on broad generalities about what each asserted reference allegedly teaches. For example, the Petition asserts that *Aventail* discloses the “secure communication link” recited in independent claims 1, 36, and 60. But the Petition does not explain what particular features in *Aventail* teach a secure communication link. (*See* Petition at 16-22.) Instead, the Petition discusses *Aventail* in

generalities that paraphrase the claim language. (*See, e.g., id.* at 17, “[T]he Extranet Server would facilitate the establishment of an anonymous and encrypted communication link between the client computer and the destination computer.”) The Petition does not identify what in *Aventail* constitutes the purported secure communication link.

Accordingly, the Petition fails to comply with § 42.104(b)(4). The Petition itself does not specify where each element of the claims is found in each prior art reference, nor does the Petition’s general discussion of the references identify what aspects of the prior art it relies on. Because the Petition contravenes § 42.104(b)(4), it does not demonstrate a reasonable likelihood of showing that any of claims 1-3, 5-8, and 14-60 are anticipated or rendered obvious by *Aventail* or *Beser*.

C. The Board Should Not Institute Based on the Petition’s Redundant Grounds

In addition to its pending *inter partes* reexamination of the ’211 patent, Apple has filed two petitions requesting *inter partes* review of the same claims of the ’211 patent (this Petition and the one in Case No. IPR2013-00398). The Board should reject this Petition because it raises grounds of rejection that are internally redundant and redundant in view of the proposed grounds in the ’398 Petition. The Board has held that it will not consider redundant grounds of rejection like Apple’s because the Board must issue a final written decision in *inter partes* review

proceedings within one year of institution (or 18 months for good cause). *Liberty Mut.*, CBM2012-00003 Paper No. 7.⁴ Redundant grounds place a significant burden on the Board and the patent owner, and they cause unnecessary delay that jeopardizes completing the *inter partes* review by the statutory deadline. *Id.*

In *Liberty Mutual*, the Board identified two types of redundant rejections: (1) “horizontally” redundant rejections and (2) “vertically” redundant rejections. *Id.* at 3. The Board explained that horizontally redundant rejections apply “a plurality of prior art references . . . not in combination to complement each other but as distinct and separate alternatives.” *Id.* In this type of redundancy, the references “provide essentially the same teaching to meet the same claim limitation, and the associated arguments do not explain why one reference more closely satisfies the claim limitation at issue in some respects than another reference, **and** vice versa.” *Id.*

Vertical redundancy “exists when there is assertion of an additional prior art reference to support another ground of unpatentability when a base ground already

⁴ Although *Liberty Mutual* is a decision in a covered business method review, the Board has applied its reasoning to *inter partes* reviews based on the similar considerations that apply in both types of proceedings. See, e.g., *LaRose Indus., LLC v. Capriola Corp.*, IPR2013-00120 (July 22, 2013) Paper No. 20 at 4 (citing *Liberty Mut.*, CBM2012-00003 Paper No. 7 at 2-12).

has been asserted against the same claim without the additional reference and the Petitioner has not explained what are the relative strength and weakness of each ground.” *Id.* at 12. Thus, an example of vertical redundancy is when a proposed rejection is based on one reference alone while another proposed rejection against the same claim is based on that same reference plus another reference. Apple’s petitions contain both types of redundancy.

In the ’398 proceeding, Apple proposed four grounds of rejection against the ’211 patent claims:

P1-1. *Beser* allegedly anticipates claims 1-3, 5-8, and 14-60;

P1-2. *Beser* in view of *RFC 2401* allegedly renders obvious claims 1-3, 5-8, and 14-60;

P1-3. *Provino* allegedly anticipates claims 1-3, 5-8, and 15-60; and

P1-4. *Provino* in view of *Beser* allegedly renders obvious claims 3, 25, 29-32, 49, and 53-56.

Here, Apple proposes additional grounds of rejection, including the following three:

P2-1. *Aventail* allegedly anticipates claims 1-3, 5-8, and 14-60;

P2-2. *Aventail* in view of *Beser* allegedly renders obvious claims 3, 31, 32, 55, and 56; and

P2-3. *Aventail* allegedly renders obvious claims 31, 32, 55, and 56.

These examples demonstrate horizontal redundancy. For example, the '398 Petition's proposed rejections of claims 1-3, 5-8, and 14-60 based on *Beser* and *Provino* individually (P1-1 and P1-3) are horizontally redundant of one another and of this Petition's proposed *Aventail* rejection (P2-1). The rejections challenge the same claims, but neither petition explains how any of *Aventail*, *Beser*, or *Provino* purportedly provides a better unpatentability position than any other in any respect.

As another example, the '398 Petition's proposed rejections of claims 1-3, 5-8, and 14-60 based on *Beser* (P1-1), of claims 1-3, 5-8, and 14-60 based on *Beser* in view of *RFC 2401* (P1-2), and of claims 3, 25, 29-32, 49, and 53-56 based on *Provino* in view of *Beser* (P1-4) are horizontally redundant of this Petition's proposed rejection of claims 3, 31, 32, 55, and 56 based on *Aventail* in view of *Beser* (P2-2), at least for the common claims. Neither petition explains how any of the '398 Petition's *Beser*, *Beser-RFC 2401*, or *Provino-Beser* proposed rejections provides a better unpatentability position than this Petition's *Aventail-Beser* proposed rejection, or vice versa.

As yet another example, the '398 Petition's proposed rejection of dependent claims 3, 25, 29-32, 49, and 53-56 based on *Provino* in view of *Beser* (P1-4) is horizontally redundant of this Petition's proposed rejections of claims 3, 31, 32, 55, and 56 based on *Aventail* in view of *Beser* alone (P2-2) and on *Aventail* alone

(P2-3), at least for common claims 3, 31, 32, 55, and 56. (*See* '398 Petition at 55-60.) Neither Petition explains how either of the proposed *Aventail-Beser* or *Aventail*-only rejections of the dependent claims improves upon the *Provino-Beser* rejection of the dependent claims proposed, or vice versa.

The above examples also demonstrate vertical redundancy. For example, the Petition's proposed *Aventail* anticipation rejections (P2-1) are vertically redundant of the proposed *Aventail-Beser* and *Aventail* obviousness rejections (P2-2 and P2-3), at least for common claims 31, 32, 55, and 56. Apple does not explain how *Aventail* alone provides a better unpatentability position for claims 31, 32, 55, and 56 than *Aventail-Beser*, or vice versa. Thus, either proposed rejection is just an "assertion of an additional prior art reference to support another ground of unpatentability when a base ground already has been asserted against the same claim without the additional reference," and "the Petitioner has not explained what are the relative strength and weakness of each ground." *Liberty Mut.*, CBM2012-00003 Paper No. 7 at 12. As a result, the grounds are vertically redundant and should not be considered.

As in *Liberty Mutual*, here Apple simply proposes different references or different combinations that "provide essentially the same teaching to meet the same claim limitation, and the associated arguments do not explain why one reference [or reference combination] more closely satisfies the claim limitation at

issue in some respects than another reference [or reference combination], **and** vice versa.” *Id.* at 3. Despite that “the focus of redundancy is on whether a petitioner articulated a meaningful distinction in terms of the relative strengths and weaknesses with respect to [the] application of the prior art reference disclosures to one or more claim limitations,” Apple has identified no distinctions whatsoever. *LaRose*, IPR2013-00120 Paper No. 20 at 4. Accordingly, the Board should deny the Petition because it presents internally redundant grounds and grounds redundant to those in the ’398 proceeding.⁵

D. The Petition Fails to Establish a Reasonable Likelihood of Prevailing as to Any Challenged Claim

On its face, the Petition fails to establish a reasonable likelihood of prevailing as to any challenged claim of the ’211 patent. *Inter partes* review thus may not be instituted. 35 U.S.C. § 314(a).

⁵ The issues presented in this Petition and the ’398 Petition are also redundant of the issues presented in Apple’s pending reexamination of the ’211 patent. (*See* Ex. 1055, non-final Office Action adopting anticipation and obviousness rejections of the ’211 patent claims based on *Provino* and *Beser*, among others.)

1. The Two Documents Called “*Aventail*” Cannot Anticipate Claims 1-3, 5-8, and 14-60

Aventail is not a single document. It consists of two documents: (1) “Aventail Connect v3.01/v2.51 Administrator’s Guide” (Ex. 1007 at 1-120), and (2) “Aventail ExtraNet Center v3.0 Administrator’s Guide” (*id.* at 121-94). Indeed, Petitioner’s declarant refers to *Aventail* as “a set of two manuals.” (Ex. 1003 ¶ 206.) While the Petition seldom cites to either of the *Aventail* documents (as discussed above), the invalidity analysis offered by Petitioner’s declarant mixes and matches from both documents. (*Compare, e.g., id.* ¶¶ 225-64, 267-91, citing portions of “Aventail Connect v3.01/v2.51 Administrator’s Guide,” with *id.* ¶¶ 265-66, 293-99, citing portions of “Aventail ExtraNet Center v3.0 Administrator’s Guide.”)⁶

The Petition merges these two separate documents into a single PDF file, labels it “*Aventail*,” and argues that the merged PDF anticipates claims 1-3, 5-8, and 14-60. The Petition identifies no basis for treating these separate documents as one, and in combining them violates a basic tenet of anticipation: “For a prior art

⁶ To the extent the Petition seeks to rely on the *Aventail* references as anything other than printed publications (e.g., as a prior art system), such reliance would be improper here. 35 U.S.C. § 311(b) (*inter partes* review can only be based on “prior art consisting of patents or printed publications”).

reference to anticipate a claim, the reference must disclose each claim limitation in a single document.” *Apple Inc. v. Int’l Trade Comm’n*, No. 2012-1338, --- F.3d ---, 2013 WL 4007535, at *4 (Fed. Cir. Aug. 7, 2013) (emphasis added). Even Petitioner’s declarant acknowledges this rule despite not applying it. (Ex. 1003 ¶ 30.)

Accordingly, the Petition fails to demonstrate a reasonable likelihood of showing that any of claims 1-3, 5-8, and 14-60 are anticipated by *Aventail* because “*Aventail*” is not a single prior art reference amenable to an anticipation analysis.

2. *Aventail* and *Beser* Cannot Render Obvious Claims 3, 31, 32, 55, and 56

The Petition does not demonstrate a reasonable likelihood of showing that claims 3, 31, 32, 55, and 56 are obvious based on *Aventail* and *Beser* because such a ground would require combining three documents in a manner that the Petition has not proposed. It would require combining (1) “*Aventail* Connect v3.01/v2.51 Administrator’s Guide” (Ex. 1007 at 1-120); (2) “*Aventail* ExtraNet Center v3.0 Administrator’s Guide” (*id.* at 121-94); and (3) *Beser* (Ex. 1009). Nevertheless, as discussed above, the Petition treats the *Aventail* references as a single document and does not identify any differences between their teachings.

An obviousness analysis, however, requires assessing “the differences between the subject matter sought to be patented and the prior art.” 35 U.S.C. § 103(a); *see also Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17-18

(1966) (the analysis must ascertain the differences between the claimed invention and the prior art). The Petition has not provided the required analysis for this three-way combination, so it fails to demonstrate a reasonable likelihood of showing obviousness of claims 3, 31, 32, 55, and 56.

3. *Aventail* Cannot Render Obvious Claims 31, 32, 55, and 56

The Petition does not demonstrate a reasonable likelihood of showing that claims 31, 32, 55, and 56 are obvious based on *Aventail*. Similar to the discussion above, such a ground would require combining two documents in a manner the Petition has not articulated. The ground would require combining (1) “Aventail Connect v3.01/v2.51 Administrator’s Guide” (Ex. 1007 at 1-120) and (2) “Aventail ExtraNet Center v3.0 Administrator’s Guide” (*id.* at 121-94). Accordingly, the Petition fails to demonstrate a reasonable likelihood of showing obviousness of claims 31, 32, 55, and 56.

III. The Petition’s Claim Constructions Are Flawed and Should Be Rejected

In *inter partes* review, claims are to be given their “broadest reasonable construction in light of the specification.” 37 C.F.R. § 42.100(b). In applying the “broadest reasonable construction” or interpretation (“BRI”) standard, the words of the claim must be given their plain meaning unless the plain meaning is inconsistent with the specification. *In re Zletz*, 893 F.2d 319, 321 (Fed. Cir. 1989). The ordinary meaning of a term may be evidenced by a variety of sources,

including “the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) (en banc) (citation omitted).

Additionally, the prosecution history is part of the intrinsic record and should be considered when construing the claims. *Id.* at 1317. In *inter partes* review proceedings, the Board has consistently considered the prosecution history when construing the claims. *See Garmin Int’l, Inc. v. Cuozzo Speed Techs. LLC*, IPR2012-00001 (Jan. 9, 2013) Paper No. 15 at 8; *see also Motorola Solutions, Inc. v. Mobile Scanning Techs., LLC*, IPR2013-00093 (Apr. 29, 2013) Paper No. 28 at 10.

As explained below, Apple proposes several defective claim constructions that do not represent the BRI of the claims. Because it is based on incorrect claim constructions, the Petition cannot demonstrate a reasonable likelihood of prevailing as to any claim of the ’211 patent.

A. Overview of the ’211 Patent

The ’211 patent discloses several embodiments of a domain name service (“DNS”) system for establishing a secure communication link, such as a virtual private network (“VPN”) communication link, between devices connected to a network. In one embodiment, a novel, specialized DNS system receives a DNS

request and automatically facilitates the establishment of a secure communication link between two devices. (Ex. 1001 at 39:30-35.)

The '211 patent distinguishes the claimed DNS service system from a conventional DNS scheme that merely returns a requested IP address and/or public key:

Conventional Domain Name Servers (DNSs) provide a look-up function that returns the IP address of a requested computer or host. For example, when a computer user types in the web name “Yahoo.com,” the user’s web browser transmits a request to a DNS, which converts the name into a four-part IP address that is returned to the user’s browser

. . .

One conventional scheme that provides secure virtual private networks over the Internet provides the DNS server with the public keys of the machines that the DNS server has the addresses for. This allows hosts to retrieve automatically the public keys of a host that the host is to communicate with so that the host can set up a VPN without having the user enter the public key of the destination host. One implementation of this standard is presently being developed as part of the FreeS/WAN project (RFC 2535).

The conventional scheme suffers from certain drawbacks. For example, any user can perform a DNS request. Moreover, DNS requests resolve to the same value for all users.

According to certain aspects of the invention, a specialized DNS server traps DNS requests and, if the request is from a special type of user (e.g., one for which secure communication services are defined), the server does not return the true IP address of the target node, but instead automatically sets up a virtual private network between the target node and the user.

(*Id.* at 38:58-39:35.)

Compared with a conventional DNS known at the time of filing the '211 patent—which is described as merely returning a requested IP address and/or public key—the claimed DNS service system of the '211 patent supports establishing a secure communication link and provides an indication of the same. (*See, e.g., id.* at 55:38-46, 57:38-46, 59:9-60:8.) For example, in FIGS. 26 and 27 of the '211 patent, reproduced below, a DNS server 2602 including a DNS proxy 2610 supports establishing a VPN link between a computer 2601 and a secure target site 2604. (*Id.* at 39:51-41:43.)

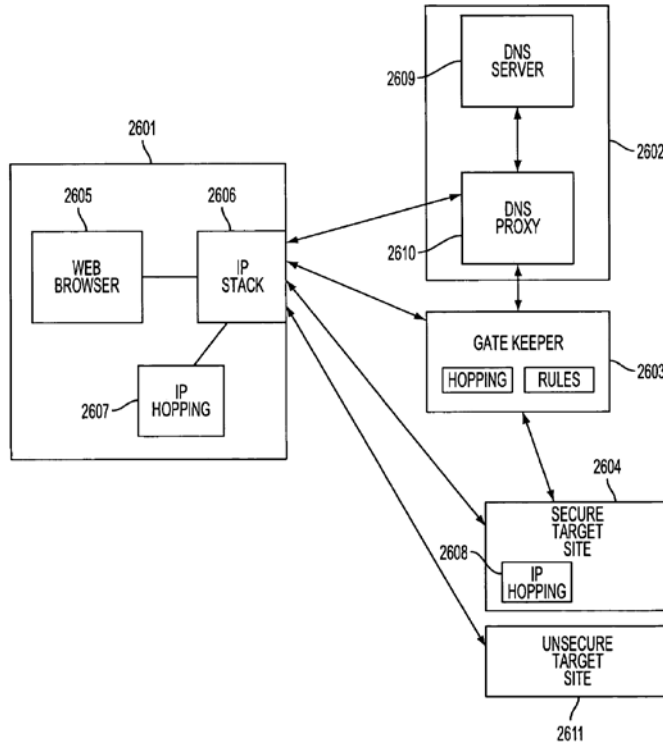


FIG. 26

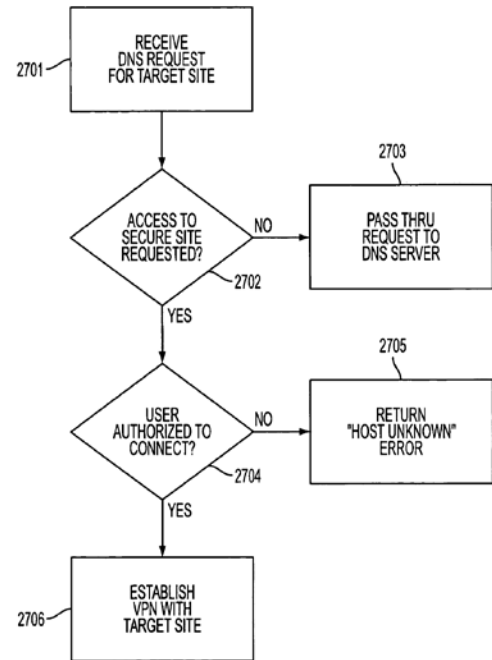


FIG. 27

Here, the DNS server 2602 receives a DNS request for a target site from computer 2601. (*Id.* at 40:32-35.) A DNS proxy 2610 at the DNS server 2602 determines whether the target site is a secure site. (*Id.* at 39:57-59, 40:32-39.) If access to a secure site has been requested, the DNS proxy 2610 determines whether the computer 2601 is authorized to access the site. (*Id.* at 40:40-42.) If so, the DNS proxy 2610 transmits a message to gatekeeper 2603 to create a secure communication link (e.g., a VPN link) between computer 2601 and secure target site 2604. (*Id.* at 39:63-66.) In this example, the gatekeeper 2603 allocates resources (in this case, IP hop blocks) for the secure communication link to the computer 2601 and secure target site 2604. (*Id.* at 39:66-40:3.) The DNS proxy

2610 then responds to the computer 2601's DNS request with an address received from the gatekeeper 2604. (*Id.* at 40:3-7.) In this manner, the specialized DNS service system supports establishing a secure communication link, doing more than a conventional DNS server at the time of the invention.

B. “Domain Name” (Claims 1, 2, 15-18, 20, 21, 24-26, 35-37, 39, 40, 42, 44, 45, 48-50, 59, and 60)⁷

VirnetX's Proposed Construction	Apple's Proposed Construction ⁸	New Bay's Proposed Construction
A name corresponding to a network address	A name corresponding to an IP address	'211 and '504 patents: a name corresponding to a network address ----- '135 and '151 patents: a name corresponding to an IP address or a group of IP addresses

The BRI of “domain name” is “a name corresponding to a network address.”

New Bay agrees and proposes the same construction. (Ex. 2012 at 15, Petition for *Inter Partes* Review in Case No. IPR2013-00378.)

⁷ VirnetX identifies only the claims Apple challenges in its Petition that expressly recite the terms at issue. Claims that depend from the identified claims may also implicitly contain the terms.

⁸ In Apple's *inter partes* review petitions for the '211 patent (this Petition and the '398 Petition), Apple challenges additional claims that New Bay does not challenge.

Apple asserts that the BRI “should encompass [VirnetX’s] contention that it can be ‘a name corresponding to an IP address.’” (Petition at 10.) VirnetX’s and New Bay’s construction reciting a “network address” is consistent with Apple’s view because, as New Bay recognizes, the patent specification “uses the term ‘network addresses’ generically and often more specifically refers to ‘IP addresses.’” (Ex. 2012 at 16, Petition for *Inter Partes* Review in Case No. IPR2013-00378) Thus, VirnetX’s construction reciting “a network address” encompasses, as one example, an IP address.⁹

⁹ New Bay proposes a different construction of “domain name” for U.S. Patent No. 6,502,135 (“the ’135 patent”) and U.S. Patent No. 7,490,151 (“the ’151 patent”). (Ex. 2021 at 11, Petition for *Inter Partes* Review in Case No. IPR2013-00375; Ex. 2022 at 11, Petition for *Inter Partes* Review in Case No. IPR2013-00376) (construing “domain name” as “a name corresponding to an IP address or a group of IP addresses.”) As explained in VirnetX’s Preliminary Responses in Case Nos. IPR2013-00375 and -00376, a different construction for the ’135 and ’151 patents is unnecessary because their claims already specify that the network address is an IP address.

C. “Top-Level Domain Name” (Claims 2-4 and 37)

VirnetX’s Proposed Construction	Apple’s Proposed Construction	New Bay’s Proposed Construction
Plain meaning—a name that identifies the top level in a domain naming system	--	A name used as an ending component in a domain name

Claims 2-4 and 37 of the ’211 patent recite a “top-level domain name.” The BRI of “top-level domain name,” as used in that phrase, is “a name that identifies the top level in a domain naming system.” According to the dictionary on which New Bay relies for the definition of VPN, “top-level domain” means “the highest level domain category in the Internet domain naming system.” (Ex. 2013 at 977, *McGraw-Hill Computer Desktop Encyclopedia* (9th ed. 2001).) Consistent with this definition, the BRI of “top-level domain name,” is simply “a name that identifies the top level in a domain naming system.”

The claims and specification of the ’211 patent support this construction. For example, dependent claim 4 recites the exemplary secure top-level domain names “.scom, .sorg, .snet, .sgov, .sedu, .smil and .sint.” (Ex. 1001 at 55:52-54; *see also id.* at 7:34-37, “Each secure computer network address is based on a non-standard top-level domain name, such as .scom, .sorg, .snet, .snet, .sedu, .smil and .sint.”) These exemplary secure domain names identify the highest level in their domain naming system. The specification also identifies exemplary nonsecure top-level domain names: “In the situation when computer network 3302

is the Internet, computer 3304 typically will have a standard top-level domain name such as .com, .net, .org, .edu, .mil or .gov.” (*Id.* at 49:14-17.) The exemplary nonsecure domain names, likewise, represent the highest level in an Internet domain naming system. Accordingly, the claims and specification support that “top-level domain name” means “a name that identifies the top level in a domain naming system.”

New Bay’s construction that “top-level domain name” means “a name used as an ending component in a domain name” is incorrect because it targets syntax over substance. Depending upon the particular type of domain naming system at issue, the “ending component” may not necessarily identify the top level or even identify the domain naming system at all. In a standard Internet domain naming system according to *RFC 1034*—which uses the suffixes .com, .net, .org, .edu, .mil, .gov, etc. to identify the top level of the domain naming system—it may be the case that the “ending component” identifies the top level. (*See* Ex. 2014, P. Mockapetris, *RFC 1034*, “Domain Names - Concepts and Facilities,” bearing date November 1987.) But in top-down domain naming schemes such as X.500, the prefix, not the ending component, specifies the top level. (*See* Ex. 2015 at 6-7, ITU-T Recommendation X.500, “Series X: Data Networks, Open System Communications and Security,” bearing date November 2008.)

New Bay recognizes that the claims are not limited to the specific “domain name service” implementation promulgated by the Internet Engineering Task Force (IETF). (Ex. 2012 at 20, Petition for *Inter Partes* Review in Case No. IPR2013-00378.) But its proposed construction for “top-level domain name” would do just that—limit the claims to the specific Internet domain naming syntax described in *RFC 1034*, in which the “ending component” identifies the top level. Thus, New Bay’s construction is incorrect and the Board should reject it.

D. “Domain Name Service” (Claims 1 and 60)

VirnetX’s Proposed Construction	Apple’s Proposed Construction	New Bay’s Proposed Construction
No construction necessary; alternatively, a lookup service that returns a resource for a requested domain name	A lookup service that will return an IP address or an error code in response to a domain name resolution request	A lookup service that returns an IP address for a requested domain name

The term “domain name service” is plain on its face and does not require construction. If the Board deems construction of “domain name service” necessary, however, it should be construed to mean “a lookup service that returns a resource for a requested domain name.” VirnetX’s alternative construction is consistent with New Bay’s, but recognizes that a domain name service may return resources other than IP addresses for domain names. (*See* Ex. 1001 at 39:18-21, citing Ex. 2016, D. Eastlake, *RFC 2535*, “Domain Name System Security Extensions,” bearing date March 1999.) For example, *RFC 2535*, cited in the

patent specification, explains that a domain name service may store public key resource records (KEY RRs) and signature resource records (SIG RRs). (Ex. 2016 at 16.) Thus, “domain name service” should not be limited to a lookup service that returns an IP address for a requested domain name.

Apple’s construction parallels New Bay’s but adds an additional requirement that the lookup service will return an IP address or an “error code.” (Petition at 10.) According to Apple, the “error code” limitation should be added to the claims because, under “standard procedures” (defined in *RFC 1034* and *RFC 1035*), “either an IP address or an error may be returned.” (*Id.*) Apple is wrong because, as New Bay correctly points out, the claims are not limited to the conventional domain name service implementation defined by the IETF. (Ex. 2012 at 20-21.) Moreover, the specification differentiates the type of conventional, standard DNS system relied on by Apple from those claimed. (*See* Ex. 1001 at 38:58-39:35, differentiating the claimed domain name service systems from the standard systems defined in *RFC 2535*.) For these reasons, Apple’s argument limiting the claims to the standard procedures defined by the IETF (*RFC 1034* and *RFC 1035*) should be rejected.

E. “Domain Name Service System” (Claims 1, 5, 7, 8, 14-17, 19-24, 27, 33, 35, 36, 41, 48, 51, 57, 59, and 60)

VirnetX’s Proposed Construction	Apple’s Proposed Construction	New Bay’s Proposed Construction
Plain meaning; no construction necessary	A lookup service, comprising one or more applications or devices, that will return to a requester an IP address or an error code in response to a domain name resolution request	A system that performs a lookup service that returns an IP address for a requested domain name and which may include a single device or multiple devices ¹⁰

“Domain name service system” need not be construed. It is the subject of independent claim 1, for example, which already defines its characteristics: “a domain name service system configured and arranged to be connected to a communication network, store a plurality of domain names and corresponding network addresses, receive a query for a network address, and indicate in response to the query whether the domain name service system supports establishing a secure communication link.” Since the claims themselves define the

¹⁰ New Bay proposes different constructions for the term “domain name service system” in the ’211 and ’504 patents. (*Compare* Ex. 2012 at 15, 19, Petition for *Inter Partes* Review in Case No. IPR2013-00378 with Ex. 2023 at 16, 22, Petition for *Inter Partes* Review in Case No. IPR2013-00377.) Nevertheless, New Bay does not explain why different constructions of this term are required.

characteristics of the domain name service system, no further construction is necessary.

Nonetheless, Apple and New Bay propose different constructions for the term. According to Apple, it means “a lookup service, comprising one or more applications or devices, that will return to a requester an IP address or an error code in response to a domain name resolution request.” (Petition at 11.) New Bay, on the other hand, argues that “domain name service system” means “a system that performs a lookup service that returns an IP address for a requested domain name and which may include a single device or multiple devices.” (Ex. 2012 at 15, 19-21, Petition for *Inter Partes* Review in Case No. IPR2013-00378.) Apple’s and New Bay’s constructions, however, at times are inconsistent with the language of claim 1, and at other times are redundant of other language in claim 1. Both constructions should be rejected.

Apple contends that an “error code” requirement should also be read into “domain name service system” in light of the IETF standards defined in *RFC 1034* and *RFC 1035*. (Petition at 10-11.) According to Apple, the “error code” limitation should be added to the claims because, under “standard procedures” (defined in *RFC 1034* and *RFC 1035*), “either an IP address or an error may be returned.” (*Id.* at 10.) Apple is wrong because, as New Bay correctly points out, the claims are not limited to the conventional domain name service implementation

defined by the IETF. (Ex. 2012 at 20-21, Petition for *Inter Partes* Review in Case No. IPR2013-00378.) Moreover, the specification differentiates the type of conventional, standard DNS system relied on by Apple from those claimed. (See Ex. 1001 at 38:55-39:35, differentiating the claimed domain name service systems from the standard systems defined in *RFC 2535*.) For these reasons, Apple’s argument limiting the claims to the standard procedures defined by the IETF (*RFC 1034* and *RFC 1035*) should be rejected.

New Bay’s construction is no better, and adds no benefit beyond the words already in the claims. “A system that performs a lookup service that returns an IP address for a requested domain name” is merely a synonymous rewording of “domain name service system.” In addition, New Bay’s caveat that the claimed domain name service system “may include a single device or multiple devices” only confuses matters, because nothing in the claims requires the claimed domain name service system to have any particular distribution across devices.

In light of the above, the Board need not construe “domain name service system.”

F. “Secure Communication Link” (Claims 1, 9, 10, 16-18, 22, 24, 26-29, 33, 35, 36, 40-42, 46, 48, 50-53, 57, 59, and 60)

VirnetX’s Proposed Construction	Apple’s Proposed Construction	New Bay’s Proposed Construction
A direct communication link that provides data security through encryption	A communication link in which computers privately communicate with each other on insecure paths between the computers where the communication is both secure and anonymous, and where the data transferred may or may not be encrypted	A direct communication link that provides data security

VirnetX agrees with New Bay that “secure communication link” means a direct communication link that provides data security. A “secure communication link,” however, also requires “encryption” to provide data security, as determined by the district court in the ’417 Litigation based on the prosecution history of the ’211 patent. VirnetX’s construction is also supported by the intrinsic record.

New Bay states that its construction was “adopted by the district court in [the ’417 Litigation].” (Ex. 2012 at 21, Petition for *Inter Partes* Review in Case No. IPR2013-00378.) New Bay neglects to mention that the district court later changed this construction based on arguments VirnetX made during a reexamination of the ’211 patent. New Bay also fails to note that VirnetX’s proposed construction of “secure communication link” is the same as that ultimately adopted by the district court in the ’417 Litigation. (See Ex. 2017 at 1, Order in the ’417 Litigation (E.D. Tex. Oct. 4, 2012).) Like New Bay, Apple does

not address the prosecution disclaimer regarding “encryption” in its petitions. (*See* Petition at 12-15.)

After the claim construction hearing in the ’417 Litigation, Apple and the other defendants filed a Motion for Reconsideration of the Construction of the Term “Secure Communication Link.” (*See* Ex. 2018, Motion for Reconsideration in the ’417 Litigation (E.D. Tex. June 21, 2012).) The defendants—including Apple—argued that “VirnetX unequivocally disclaimed ‘secure communications links’ that are not encrypted.” (*Id.* at 1, 2.) In particular, the defendants cited arguments made by VirnetX in the *inter partes* reexamination of the ’211 patent (Control No. 95/001,789), to the effect that the *Beser* reference does not disclose a “secure communication link” involving encryption. (Ex. 1056 at 28-29, Patent Owner’s Response to Office Action of January 18, 2012.) VirnetX did not oppose the defendants’ motion. The district court granted the defendants’ motion in full. (*See* Ex. 2017 at 1, Order in the ’417 Litigation (E.D. Tex. Oct. 4, 2012).)

This prosecution disclaimer of secure communication links without encryption is relevant under the BRI standard. *See In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004) (“Absent claim language carrying a narrow meaning, the PTO should only limit the claim based on the specification or prosecution history when those sources expressly disclaim the broader definition.” (emphasis added)). Indeed, in *inter partes* review proceedings, the Board considers the prosecution

history when construing the claims. *See Garmin Int’l*, IPR2012-00001 Paper No. 15 at 8; *see also Motorola Solutions*, IPR2013-00093 Paper No. 28 at 10; *ZTE Corp. & ZTE (USA) Inc. v. ContentGuard Holdings. Inc.*, IPR2013-00134 (June 19, 2013) Paper No. 12 at 16; *Xilinx, Inc. v. Intellectual Ventures I LLC*, IPR2013-00112 (June 27, 2013) Paper No. 14 at 6.

The intrinsic record further supports VirnetX’s construction that a secure communication link requires encryption. For example, the specification refers to the “FreeS/WAN” project as the conventional scheme of creating a “VPN,” which is a type of secure communication link. (Ex. 1001 at 39:18-26.) The FreeS/WAN glossary of terms in the ’211 patent’s prosecution history defines a VPN as “a network which can safely be used as if it were private, even though some of its communication uses insecure connections. All traffic on those connections is encrypted.” (Ex. 2019 at 24, Glossary for the Linux FreeS/WAN Project.) Thus, both intrinsic and extrinsic evidence demonstrate that secure communication links, such as VPNs, require encryption.

Apple asserts that a secure communication link does not require encryption, contending that the specification “refers to a technique that does not use encryption to protect the anonymity of the VPN.” (Petition at 13, citing Ex. 1001 at 2:21-32.) However, this embodiment does not describe or even mention a VPN or secure communication link.

Apple’s lengthy construction should be rejected for other reasons as well. For example, nowhere does Apple explain what “secure” means in its purported requirement that “the communication is both secure and anonymous.” Instead, Apple focuses on the term “virtual private network” recited in the claims of VirnetX’s ’135 patent, and argues that the term “secure communication link” in the ’211 patent should be construed similarly. (*See id.* at 14-15.) Apple contends that, despite a disclaimer of “virtual private networks” that “do not ‘directly’ communicate” in the ’135 patent, the Board should not construe “virtual private network” in that patent—and “secure communication link” in the ’211 patent—to require a “direct” communication link. *Id.* Yet the only support Apple cites for this argument is a portion of the Manual of Patent Examining Procedure (“MPEP”) discussing the BRI. (*See id.* at 15.) Nothing in this section of the MPEP supports Apple’s argument that a prosecution disclaimer is irrelevant under the BRI. To the contrary, prosecution disclaimers are plainly relevant under the BRI, as discussed above.

Accordingly, the Board should construe secure communication link to mean “a direct communication link that provides data security through encryption.”

G. The “Indication” Phrases (Claims 1, 17, 24, 36, 41, 48, and 60)

VirnetX’s Proposed Construction	Apple’s Proposed Construction	New Bay’s Proposed Construction
Plain meaning; no construction necessary	Anything that indicates the domain name service system supports secure communications, including a visible or audio signal, or the establishment of a secure communication link itself.	Instructions for execution by a computer, such as a server, for serving as a sign or token signifying

Challenged independent claim 1 of the ’211 patent recites the phrase “indicate in response to the query whether the domain name service system supports establishing a secure communication link.” As recognized by the district court in related litigations involving the ’211 patent, the plain meaning of the claimed “indicating” is readily understandable, so the term does not require further construction. (*See* Ex. 1049 at 27-28, 31, Memorandum Opinion and Order in the ’417 Litigation (E.D. Tex. Apr. 25, 2012); Ex. 2020 at 10, 13, Memorandum Opinion and Order in *VirnetX Inc. v. Mitel Networks Corp. et al.*, Case No. 6:11-CV-18 (E.D. Tex. Aug. 1, 2012).)

New Bay’s proposal for “indicating” is not actually a construction at all. New Bay simply rewrites “indicating” to mean something “serving as a sign or token signifying.” (Ex. 2012 at 15, Petition for *Inter Partes* Review in Case No. IPR2013-00378.) Something “serving as a sign or token signifying” is

synonymous with “indication.” New Bay’s construction therefore adds no claim construction value and should be rejected.

Apple construes the phrase to mean “anything that indicates the domain name service system supports secure communications, including a visible or audio signal, or the establishment of a secure communication link itself.” (Petition at 12.) Apple’s construction is incorrect for two reasons.

First, the claims require that the “indication” come from the domain name service system. (*See, e.g.*, Ex. 1001, claim 36, “A non-transitory machine-readable medium comprising instructions executable in a domain name service system, the instructions comprising code for: . . . indicating in response to the query whether the domain name service system supports establishing a secure communication link.” (emphasis added).) Apple’s construction that the claimed “indicating” is “anything that indicates the domain name service system supports secure communications” improperly divorces the “indicating” from the “domain name service system.” Indeed, under Apple’s construction, the indicating could come from anywhere, even outside the domain name service system.

Second, Apple’s construction introduces extraneous language that is not required by the claims and does not aid in understanding them. For example, the claims require indicating that the domain name service system supports “establishing a secure communication link,” not an indication that it supports

“secure communications.” Further, the claims do not limit the “indicating” to any specific embodiment, such as “a visible or audio signal, or the establishment of a secure communication link itself.” (*See* Ex. 1049 at 27, Memorandum Opinion and Order in the ’417 Litigation, “Neither the specification nor the claim language provides a basis for limiting ‘indicating’ to a visual indicator”; Ex. 2020 at 10, Memorandum Opinion and Order in *VirnetX Inc. v. Mitel Networks Corp. et al.*, Case No. 6:11-CV-18 (E.D. Tex. Aug. 1, 2012), “The claims themselves do not limit whether the indication is made to the user or the user’s computer.”) Accordingly, Apple’s additional commentary only serves to confuse matters and does not aid in understanding the claims.

H. “Transparently” (Claims 27 and 51)

VirnetX’s Proposed Construction	Apple’s Proposed Construction	New Bay’s Proposed Construction
The user need not be involved in creating the secure communication link	No construction proposed	The user need not be involved in creating the secure link

VirnetX agrees with New Bay that the ’211 patent defines the term “transparently”—in both the specification and the claims. “Transparently” appears in claims 27 and 51 of the ’211 patent. Claim 27, for example, recites, “wherein the domain name service system is configured to enable establishment of a secure communication link between a first location and a second location transparently to a user at the first location.” Because the establishment of the secure

communication link is transparent to the user, the BRI of “transparently” is that the user need not be involved in creating the secure communication link. The specification confirms this understanding. (*See, e.g.*, Ex. 1001 at 40:61-62, “. . . transparently to the user (i.e., the user need not be involved in creating the secure link).”) VirnetX’s construction should be adopted instead of New Bay’s, however, because VirnetX accurately refers to the “secure communication link” in its construction, whereas New Bay refers only to the “secure link.”

I. “Secure Name” (Claims 25 and 49)

VirnetX’s Proposed Construction	Apple’s Proposed Construction	New Bay’s Proposed Construction
A name that corresponds to a secure network address	A secure non-standard domain name, including a non-standard top level domain (e.g., .scom) or a telephone number	--

In the ’211 patent claims, “secure name” means “a name that corresponds to a secure network address.” Independent claims 1 and 36 recite that the domain name service system “stor[es] a plurality of domain names and corresponding network addresses.” Claims 25 and 49 refer to the independent claims’ domain names that correspond to network addresses, and specify that at least one of them comprises or includes “a secure name.” Since the domain name is a secure name, its corresponding network address is a secure network address. Thus, the claim

language itself supports that a “secure name” is “a name that corresponds to a secure network address.”

The '211 patent specification also supports this construction by explaining that a “secure domain name”¹¹ corresponds to a secure network address. (*See, e.g.*, Ex. 1001 at 50:65-66, “SDNS 3313 contains a cross-reference database of secure domain names and corresponding secure network addresses,” 50:67-51:2, “for each secure domain name, SNDS 3313 stores a computer network address corresponding to the secure domain name,” 51:2-5, “[a]n entity can register a secure domain name in SDNS 3313 so that a user who desires a secure communication link . . . can automatically obtain the secure computer network address”)

Apple construes “secure name” as “a secure non-standard domain name, including a non-standard top level domain name (e.g., .scom) or a telephone

¹¹ In a litigation involving a related VirnetX patent, U.S. Patent No. 7,188,180, the district court construed the similar term “secure domain name” to mean “a domain name that corresponds to a secure computer network address.” (Ex. 1045 at 30, Memorandum Opinion in *VirnetX, Inc. v. Microsoft Corp.*, Case No. 6:07-CV-80 (E.D. Tex. July 30, 2009).) VirnetX’s proposed construction of “secure name” is consistent with the district court’s construction of “secure domain name.”

number.” (Petition at 15-16.) Apple’s construction is circular because it does not address the “secure” part of the term. Apple simply adopted as its construction a list of exemplary secure names that VirnetX provided as background during prosecution of U.S. Patent No. 8,051,181. (*Id.*, citing Ex. 1073 at 9, Response/Amendment “B” to April 8, 2010, Office Action in U.S. Application No. 11/679,418, filed October 8, 2010, “[f]or example, a ‘secure name’ can be a secure non-standard domain name, such as a secure non-standard top-level domain name (e.g., .scom) or a telephone number.”) VirnetX does not dispute that, under certain circumstances, a non-standard domain name, non-standard top-level domain (e.g., .scom), or telephone number may be a “secure name.” But a mere list of examples is not a construction.

Apple also takes VirnetX’s prosecution statement out of context. In the same passage cited by Apple—immediately preceding the list of exemplary “secure names” that Apple adopts as a construction—VirnetX defines “secure name” in a way that is consistent with its proposed construction:

First, the Applicant submits that a “secure name” is a name associated with a network address of a first device. The name can be registered such that a second device can obtain the network address associated with the first device from a secure name registry and send a message to the first device.

(Ex. 1073 at 9.) Apple’s proposed construction, which adopts certain aspects of VirnetX’s prosecution statements but ignores others, is therefore incorrect. Accordingly, the Board should reject Apple’s construction and adopt VirnetX’s.

IV. If Trial Is Instituted, VirnetX Requests an 18-Month Schedule

For the reasons discussed, Apple’s Petition cannot be instituted. If trial is instituted in this matter, however, it would be very difficult to complete the proceeding within one year. As explained above, for the ’211 patent alone, there are three *inter partes* review petitions and two pending *inter partes* reexaminations requested by three parties. And, as the Board is aware, there are also numerous other pending *inter partes* review petitions and reexaminations involving related patents. The sheer number of issues, the overlapping issues (e.g., claim construction), the need for consistency, and other interplay between the numerous proceedings render their administration very complex for the Board and the parties. Thus, if instituted, there is good cause for the Board to set an 18-month schedule for this proceeding pursuant to 35 U.S.C. § 316(a)(1) and 37 C.F.R. § 42.100(c).¹²

¹² The Board may also extend the schedule beyond one year if it joins this proceeding with the other Apple or New Bay *inter partes* review proceedings involving the ’211 patent. *See* 35 U.S.C. § 316(a)(1); 37 C.F.R. § 42.100(c) (“The time can be extended by up to six months for good cause by the Chief

V. Conclusion

For these reasons, Apple's Petition is time-barred under 35 U.S.C. § 315(b), does not comply with the rules and regulations regarding petitions, and fails to establish a reasonable likelihood that any of claims 1-3, 5-8, and 14-60 are unpatentable. Additionally, Apple has not met its burden of proving invalidity of any '211 patent claim because its unpatentability challenges are premised upon incorrect claim constructions.

Accordingly, Patent Owner respectfully requests that the Board deny the petition for *inter partes* review.¹³

Dated: October 4, 2013

By: /Joseph E. Palys/
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Registration No. 46,508

Counsel for VirnetX Inc.

Administrative Patent Judge, or adjusted by the Board in the case of joinder."
(emphasis added)).

¹³ If trial is instituted, VirnetX reserves its rights to raise additional arguments as to why Apple has failed to carry its burden and why the claims should be confirmed.

CERTIFICATE OF SERVICE

The undersigned certifies that a copy of the foregoing **Patent Owner's Preliminary Response to Petition for *Inter Partes* Review of U.S. Patent No. 7,921,211** was served electronically on October 4, 2013, in its entirety on the following:

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APPENDIX - LIST OF EXHIBITS

Exhibit No.	Description	Previously Submitted
2001	VirnetX's Original Complaint in <i>VirnetX Inc. v. Cisco Systems, Inc. et al.</i> , Case No. 6:10-CV-417 (E.D. Tex. Aug. 11, 2010)	X
2002	Jury Verdict Form Against Apple in <i>VirnetX Inc. v. Cisco Systems, Inc. et al.</i> , Case No. 6:10-CV-417 (E.D. Tex. Nov. 6, 2012)	X
2003	Excerpt from Meeting of the H. Comm. on Judiciary, Transcript of Markup of H.R. 1249 (Apr. 14, 2011)	X
2004	154 Cong. Rec. S9982-93 (daily ed. Sept. 27, 2008)	X
2005	VirnetX's Second Amended Complaint in <i>VirnetX Inc. v. Cisco Systems, Inc. et al.</i> , Case No. 6:10-CV-417 (E.D. Tex. Apr. 5, 2011)	X
2006	Jury Verdict Form as to Cisco in <i>VirnetX Inc. v. Cisco Systems, Inc. et al.</i> , Case No. 6:10-CV-417 (E.D. Tex. Mar. 14, 2013)	
2007	Final Judgment Against Apple in <i>VirnetX Inc. v. Cisco Systems, Inc. et al.</i> , Case No. 6:10-CV-417 (E.D. Tex. Feb. 28, 2013)	
2008	Final Judgment as to Cisco in <i>VirnetX Inc. v. Cisco Systems, Inc. et al.</i> , Case No. 6:10-CV-417 (E.D. Tex. Mar. 19, 2013)	
2009	VirnetX's First Amended Complaint in <i>VirnetX Inc. v. Cisco Systems, Inc. et al.</i> , Case No. 6:10-CV-417 (E.D. Tex. Feb. 4, 2011)	
2010	Proof of Service of VirnetX Inc.'s Complaint in <i>VirnetX Inc. v. Apple Inc.</i> , No. 6:12-CV-00855 (E.D. Tex. Dec. 31, 2012)	
2011	157 Cong. Rec. S5429 (daily ed. Sept. 8, 2011)	
2012	Petition for <i>Inter Partes</i> Review in Case No. IPR2013-00378	
2013	<i>McGraw-Hill Computer Desktop Encyclopedia</i> (9th ed. 2001)	
2014	P. Mockapetris, <i>RFC 1034</i> , "Domain Names - Concepts	

	and Facilities,” bearing date November 1987	
2015	ITU-T Recommendation X.500, “Series X: Data Networks, Open System Communications and Security,” bearing date November 2008	
2016	D. Eastlake, <i>RFC 2535</i> , “Domain Name System Security Extensions,” bearing date March 1999	
2017	Order in <i>VirnetX Inc. v. Cisco Systems, Inc. et al.</i> , Case No. 6:10-CV-417 (E.D. Tex. Oct. 4, 2012)	
2018	Motion for Reconsideration in <i>VirnetX Inc. v. Cisco Systems, Inc. et al.</i> , Case No. 6:10-CV-417 (E.D. Tex. June 21, 2012)	
2019	Glossary for the Linux FreeS/WAN Project	
2020	Memorandum Opinion and Order in <i>VirnetX Inc. v. Mitel Networks Corp. et al.</i> , Case No. 6:11-CV-18 (E.D. Tex. Aug. 1, 2012)	
2021	Petition for <i>Inter Partes</i> Review in Case No. IPR2013-00375	
2022	Petition for <i>Inter Partes</i> Review in Case No. IPR2013-00376	
2023	Petition for <i>Inter Partes</i> Review in Case No. IPR2013-00377	