

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION**

SYMMETRIX VIDEO SYSTEMS LLC,

Plaintiff,

v.

CISCO SYSTEMS, INC.,

Defendant.

Civil Action No. 6:20-cv-1151-ADA

JURY TRIAL DEMANDED

FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Symmetrix LLC (“Plaintiff” or “Symmetrix”) for its First Amended Complaint against Cisco Systems, Inc. (“CSI” or “Defendant”), alleges the following:

NATURE OF ACTION

1. This is an action for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. § 1 *et seq.*

THE PARTIES

2. Plaintiff Symmetrix is a limited liability company organized and existing under the laws of the State of Delaware, having its principal place of business at 261 West 35th St., Suite #1003, New York, NY.

3. Upon information and belief, CSI is a corporation organized under the laws of the California with a place of business at 170 West Tasman Drive, San Jose, California. Upon information and belief, CSI sells, offers to sell, and/or uses products and services throughout the United States, including in this judicial district, and introduces infringing products and services into the stream of commerce knowing that they would be sold and/or used in this judicial district

and elsewhere in the United States.

JURISDICTION AND VENUE

4. This is an action for patent infringement arising under the Patent Laws of the United States, Title 35 of the United States Code.

5. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).

6. Venue is proper in this judicial district under 28 U.S.C. § 1400(b).

7. This Court has personal jurisdiction over Defendant because Defendant has purposefully availed itself of the rights and benefits of the laws of this State and this Judicial District. On information and belief, Defendant is organized and existing under the laws of Delaware.

8. This Court has personal jurisdiction over the CSI under the laws of the State of Texas, due at least to their substantial business in Texas and in this judicial district, directly or through intermediaries, including: (i) at least a portion of the infringements alleged herein; and (ii) regularly doing or soliciting business, engaging in other persistent courses of conduct and/or deriving substantial revenue from goods and services provided to individuals in the State of Texas. Venue is also proper in this district because CSI has a regular and established place of business in this district. For instance, CSI has operations in this judicial district. For example, CSI has facilities located at 12515-3 Research Park Loop, Austin, TX 78759. (*See, e.g.*, [https://www.cisco.com/c/en/us/about/contact-cisco.html/general-inquiries/locating-cisco-office.](https://www.cisco.com/c/en/us/about/contact-cisco.html/general-inquiries/locating-cisco-office))

BACKGROUND

9. Bao Tran is the inventor of U.S. Patent No. 10,547,811 (“the ’811 patent”). A true and correct copy of the ’811 patent is attached as Exhibit A.

10. The ’811 patent resulted from the pioneering efforts of Mr. Tran (hereinafter “the Inventor”) in the area of video conferencing. These efforts resulted in the development of a

system and method for processor utilization-based encoding in the late 2010's. At the time of these pioneering efforts, there was no widely implemented technology to address the problem of high computing device processor utilization during video conferencing. The Inventor conceived of the invention claimed in the '811 patent as a way to manage computer device processor utilization and improve computing device performance during video conferencing.

11. For example, the Inventor developed a method for video conferencing that includes generating, at a computing device, multimedia data including audio and video corresponding to video conferencing, determining first, second and third computing device processor utilization levels, encoding first, second and third portions of the of multimedia data and sending the first, second and third encoded portions of multimedia data via a network to a second computing device, where the second computing device processor utilization level is greater than the first computing device processor utilization level and the second portion of encoded multimedia data includes audio but not video, and where the third computing device processor utilization level is less than the second computing device processor utilization level and the third portion of encoded multimedia data includes audio and video.

Advantage Over the Prior Art

12. The patented invention disclosed in the '811 patent provides many advantages over the prior art, and in particular improves the operations of encoding multimedia data by a computing device over a network while video conferencing. (*See* '811 patent at col. 11, lines 36-41.) One advantage of the patented invention is that it optimizes processor utilization of a computing device during video conferencing over a network. (*See* '811 patent at col. 11, lines 42-43.)

13. Another advantage of the patented invention is that it optimizes speed of encoding

of multimedia data. (*See id.*)

14. Because of these significant advantages that can be achieved through the use of the patented invention, Symmetrix believes that the '811 patent presents significant commercial value for companies such as CSI. Indeed, the patented invention improves the usability and marketability of the companies' video conferencing products.

Technological Innovation

15. The patented subject matter and innovations disclosed in the '811 patent addresses technical problems related to encoding and sending multimedia data by a computing device over a network, particularly problems related to management of resource utilization of a computing device's central processing unit ("CPU") (also called a central processor or main processor) in connection with multimedia data sent over a network. As the '811 patent explains, one of the limitations of the prior art as regards the encoding and sending multimedia data by a computing device over a network was that conventional video conferencing could consume all of the computing device's processor in the encode/decode task in such a way that the user cannot do anything else on his or her computer besides encoding. (*See* '811 patent at col. 11, lines 36-41.)

16. Claim 7 of the '811 patent does not merely recite the performance of some well-known business practice from the pre-Internet world along with the requirement to perform it on the Internet. Instead, claim 7 of the '811 patent is directed to an inventive concept that is deeply rooted in engineering technology, and overcomes and/or addresses problems specifically arising out of how to manage resource utilization of a computing device's CPU when sending encoded multimedia data over a network.

17. In addition, the claims of the '811 patent are directed to at least one inventive concept that improves the functioning of a computing device, particularly the functioning of a

computing device's CPU.

18. Moreover, claim 7 of the '811 patent is directed to an inventive concept that is not merely routine or conventional use of video conferencing technology. Instead, claim 7 of the '811 patent is directed to providing a new and novel solution to specific problems related to improving the management of resource utilization of a computing device's CPU when encoding multimedia data to be sent over a network.

19. And finally, the '811 patent does not preempt all the ways of encoding and sending multimedia data by a computing device over a network that may be used to improve the management of resource utilization of a computing device's CPU when sending multimedia data over a network, nor does the '811 patent preempt any other well-known or prior art technology.

20. Accordingly, claim 7 of the '811 patent recites a combination of elements sufficient to ensure that the claim in substance and in practice amounts to significantly more than a patent-ineligible abstract idea.

Defendant's Activities

21. Defendant is a technology company that develops and licenses video conferencing services.

22. Among Defendant's video conferencing services is WebEx Meetings.



Webex Meetings

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([https://www.webex.com/content/webex/c/en_US/index/downloads.html/.](https://www.webex.com/content/webex/c/en_US/index/downloads.html/))

23. On information and belief, Defendant licenses, or otherwise offers, its WebEx Meetings software according to a number of different plans, including a free personal plan, as well as starter, plus and business plans, for which a fee is charged,¹ collectively “WebEx Meetings” or the “Accused Instrumentality.” The Accused Instrumentality also includes the WebEx meetings mobile app and the WebEx meetings desktop software application described below.

24. While CSI has offered different versions of the WebEx Meetings software over the years, the Accused Instrumentality includes all versions of the WebEx Meetings software that are used or usable with a video encoder, such as an H.264 compatible encoder. Illustrative examples of such encoders include OpenH264 encoders and the Opus encoder referenced below. Upon information and belief, the versions of the WebEx Meetings software that have been used

¹ See, e.g., <https://www.webex.com/pricing/index.html>.

in connection with H.264 encoders were introduced commercially by CSI starting as early as the year 2014 and have been used since that time. As an example, CSI added an H.264 plug-in for Cisco H.264 encoders into the WebEx Meetings software in 2014. (*See* https://www.cisco.com/c/en/us/td/docs/telepresence/infrastructure/tms/config_guide/webex_enabled_telepresence/cts_webex_config/cts_webex_bridge.html.) Further, referring to the current release of the WebEx Meetings software, “WebEx video is based on H.264 SVC technology that allows video quality adaptation based upon available bandwidth.”²

25. Defendant further offers a mobile app version of WebEx Meetings to mobile device users.

26. Defendant also offers WebEx Meetings as a desktop software application to subscribers.

27. The WebEx Meetings desktop software application and the mobile app are both part of the Accused Instrumentality.

28. On information and belief, Defendant also makes the Accused Instrumentality available to its own employees for their use in the ordinary course of Defendant’s business.

29. WebEx Meetings complies with and has adopted OpenH264, a video codec specification, which defines encoding and sending video data via a network.

Supported Codecs

You can refer to these specifications to get information about the supported codecs, video definition, and bandwidth usage in Webex Teams.

We optimize the quality by using the Opus codec for audio and the OpenH264 codec for video.

² <http://www.meetingconnect.net/files/CiscoWebExVideoServices.pdf>.

(<https://help.webex.com/en-us/nckc1aeb/Video-Specifications-for-Cisco-Webex-Teams-Calls-and-Meetings>.)

About the WebEx Video Codec

The Cisco WebEx Meeting Center has adopted the H.264 standards-based Scalable Video Coding (SVC) for video compression to deliver adaptive standard-quality (SQ), high-quality (HQ), and high-definition (HD) video. HD (720p) video is currently available in Meeting Center and Training center.

The video engine consists of all the fundamental video processing modules, including capture, encoding, transmission, receiving, decoding, and rendering. It also includes supporting modules for error control, congestion control, bit-rate adaptation, and encryption.

(https://informationsecurity.report/Resources/Whitepapers/e667bc78-998b-4908-b109-0fe46c517474_Cisco%20WebEx%20Network%20Bandwidth.pdf.)

30. WebEx Meetings also complies with and has adopted Opus codec, which defines encoding and sending audio data, via a network.

Supported Codecs

You can refer to these specifications to get information about the supported codecs, video definition, and bandwidth usage in Webex Teams.

We optimize the quality by using the Opus codec for audio and the OpenH264 codec for video.

(<https://help.webex.com/en-us/nckc1aeb/Video-Specifications-for-Cisco-Webex-Teams-Calls-and-Meetings>.)

COUNT I -INFRINGEMENT OF U.S. PATENT NO. 10,547,811

31. Plaintiff incorporates by reference the allegations contained in paragraphs 1 to 30 above.

32. On January 28, 2020, the '811 patent was duly and legally issued by the United States Patent and Trademark Office under the title "System and Method(s) for Processor Utilization-based Encoding."

33. Symmetrix is the assignee and owner of the right, title and interest in and to the '811 patent, including the right to assert all causes of action arising under said patent and the right to any remedies for infringement of it.

34. On information and belief, Defendant has and continues to directly infringe at least claim 7 (the "Claimed Method") of the '811 patent when the Accused Instrumentality (via one or more computer devices) is executed and generates multiple portions of multimedia data on a computing device having a central processing unit (CPU), encodes the multimedia data and sends the encoded multimedia data from the computing device via a network to a second computing device (*e.g.* an end user computer).

35. The central processing unit of a computing device (that is executing the Accused Instrumentality) is or includes electronic circuitry that executes instructions that make up a computer program, such as Defendant's WebEx Meeting software. (*See, e.g.*, https://en.wikipedia.org/wiki/Central_processing_unit.)

36. Defendant (and licensees of Defendant) executes the Accused Instrumentality on at least one computer.



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Meet across any device

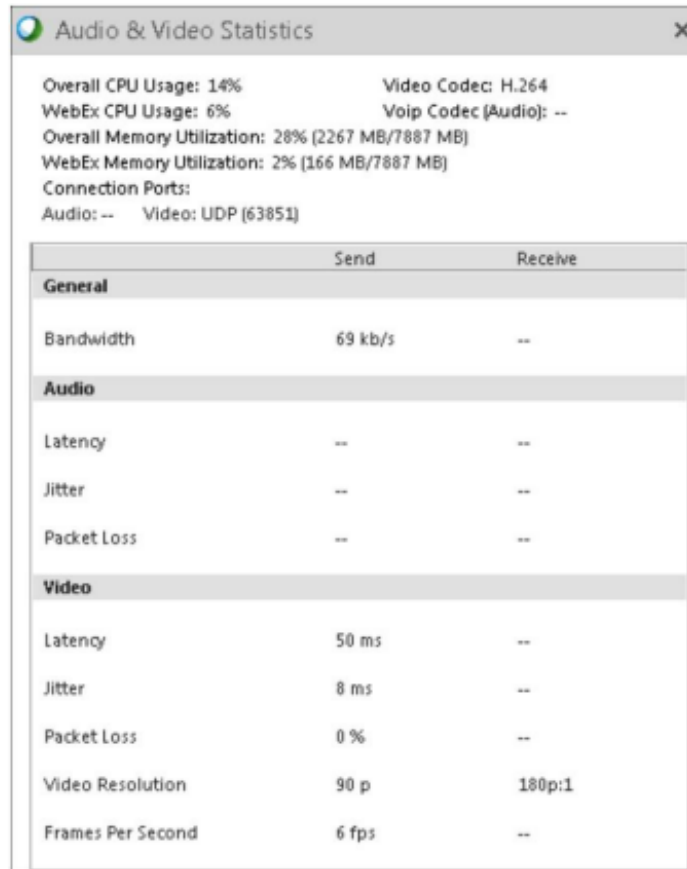


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37. The Accused Instrumentality (via a computing device) generates, at the computing device, multimedia data including video and audio. The Accused Instrumentality (via the computing device and via Defendant's cloud network), provides video conferencing. The multimedia data is communicating during and corresponds to the video conferencing. Thus, the first element of claim 7 is satisfied.

38. The Accused Instrumentality (via a computing device) determines a first utilization level of a process (of the computing device). Thus, the second element of claim 7 is satisfied.

Figure 10. Statistics Window

(https://informationsecurity.report/Resources/Whitepapers/e667bc78-998b-4908-b109-0fe46c517474_Cisco%20WebEx%20Network%20Bandwidth.pdf.)

39. The Accused Instrumentality (via a computing device) uses the OpenH264 codec and the Opus codec to encode and send video and audio portions of multimedia data. In accordance with the Claimed Method, the Accused Instrumentality (via the computing device) encodes and sends a first portion of multimedia data via a network (*e.g.* the Cisco cloud network), the first portion of the multimedia data including video and audio. Thus, the third and fourth elements of claim 7 are satisfied.

Supported Codecs

You can refer to these specifications to get information about the supported codecs, video definition, and bandwidth usage in Webex Teams.

We optimize the quality by using the Opus codec for audio and the OpenH264 codec for video.

(<https://help.webex.com/en-us/nkc1aeb/Video-Specifications-for-Cisco-Webex-Teams-Calls-and-Meetings>.)

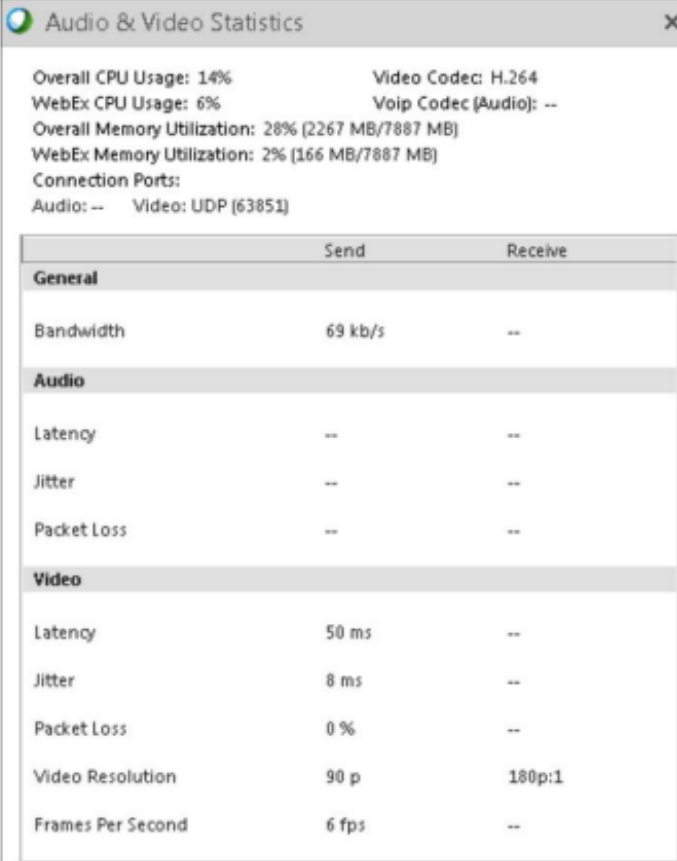
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The Cisco WebEx Meeting Center has adopted the H.264 standards-based Scalable Video Coding (SVC) for video compression to deliver adaptive standard-quality (SQ), high-quality (HQ), and high-definition (HD) video. HD (720p) video is currently available in Meeting Center and Training center.

The video engine consists of all the fundamental video processing modules, including capture, encoding, transmission, receiving, decoding, and rendering. It also includes supporting modules for error control, congestion control, bit-rate adaptation, and encryption.

(https://informationsecurity.report/Resources/Whitepapers/e667bc78-998b-4908-b109-0fe46c517474_Cisco%20WebEx%20Network%20Bandwidth.pdf.)

40. The Accused Instrumentality (via a computing device) determines a second utilization level of the processor, and the second utilization level is greater than the first utilization level. Thus, the fifth element of claim 7 is satisfied.

Figure 10. Statistics Window


The screenshot shows a window titled "Audio & Video Statistics" with a close button (X) in the top right corner. The window displays the following information:

- Overall CPU Usage: 14%
- WebEx CPU Usage: 6%
- Overall Memory Utilization: 28% (2267 MB/7887 MB)
- WebEx Memory Utilization: 2% (166 MB/7887 MB)
- Connection Ports: Audio: -- Video: UDP (63851)
- Video Codec: H.264
- Voip Codec (Audio): --

Below this information is a table with three columns: "General", "Audio", and "Video". The table has two sub-columns: "Send" and "Receive".

	Send	Receive
General		
Bandwidth	69 kb/s	--
Audio		
Latency	--	--
Jitter	--	--
Packet Loss	--	--
Video		
Latency	50 ms	--
Jitter	8 ms	--
Packet Loss	0 %	--
Video Resolution	90 p	180p:1
Frames Per Second	6 fps	--

(https://informationsecurity.report/Resources/Whitepapers/e667bc78-998b-4908-b109-0fe46c517474_Cisco%20WebEx%20Network%20Bandwidth.pdf.)

41. The Accused Instrumentality (via a computing device) encodes and sends a second portion of the multimedia data based on the second utilization level, the second portion including audio but not video. (*e.g.* see below). Thus, the sixth and seventh elements of claim 7 are satisfied.

Frame-Rate Range

WebEx supports various frame-rate ranges. On the sender side, it depends on the camera capture capability and available computing and bandwidth resources. On the receiver side, it depends on the bandwidth and computing resources.

- Up to 30-fps HQ and HD video is supported in a one-on-one meeting (only two participants point to point [P2P]).
- Up to 24-fps HQ and HD video is supported in a multipoint meeting (three or more participants).
- Up to 18-fps 180p video is supported in a one-on-one meeting (only two participants P2P).
- Up to 12-fps 180p video is supported in a multipoint meeting (three and more participants).
- The WebEx client may stop sending and receiving the video if the network or hardware environment conditions deteriorate drastically.

(https://informationsecurity.report/Resources/Whitepapers/e667bc78-998b-4908-b109-0fe46c517474_Cisco%20WebEx%20Network%20Bandwidth.pdf.)

Low-Bandwidth Errors in Cisco Webex Video Platform Meetings

Common causes and resolutions to Low-Bandwidth messages.

Low-Bandwidth errors in Cisco Webex Video Platform meetings.

I get a low-bandwidth error when I try to view video from TelePresence users.

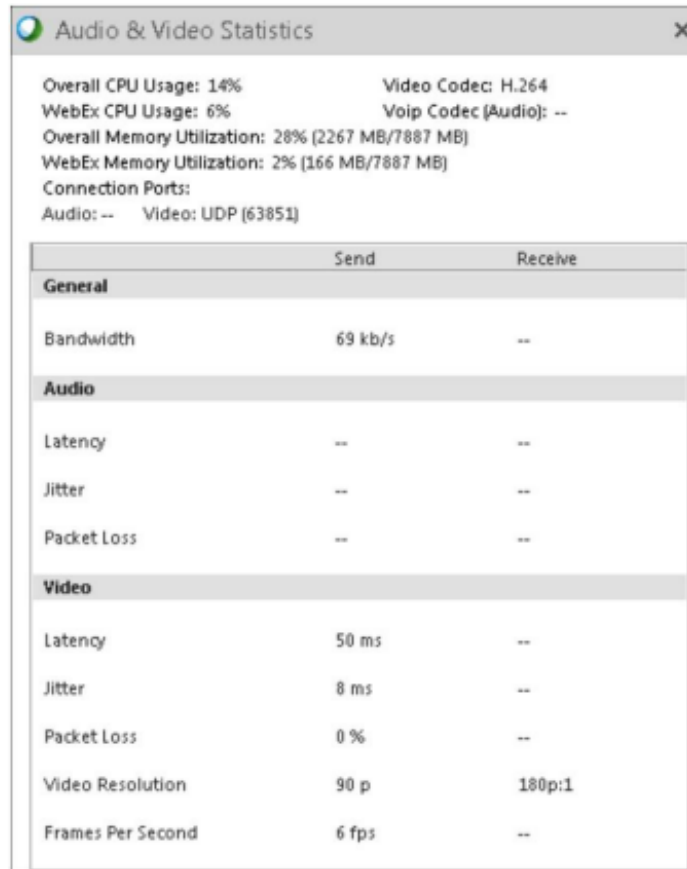
How do I troubleshoot 'low-bandwidth' errors in Cisco Webex Video Platform?

I can see a yellow triangle warning icon instead of video in my Cisco Webex Video Platform meeting.

Error: 'Due to low-bandwidth or local computer conditions (such as CPU or RAM use), video is not currently available'

(<https://help.webex.com/en-us/WBX84420/Low-Bandwidth-Errors-in-Cisco-Webex-Video-Platform-Meetings>.)

42. The Accused Instrumentality (via the computing device) determines a third utilization level of the processor, and the third utilization level is less than the second utilization level (*e.g.* see below). Thus, the eighth element of claim 7 is satisfied.

Figure 10. Statistics Window

(https://informationsecurity.report/Resources/Whitepapers/e667bc78-998b-4908-b109-0fe46c517474_Cisco%20WebEx%20Network%20Bandwidth.pdf.)

43. The Accused Instrumentality (via the computer) sends a third portion of the multimedia data based on the third utilization level, the third portion including video and audio data. (*e.g.*, see below). Thus, the ninth and final element of claim 7 is satisfied.

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(https://informationsecurity.report/Resources/Whitepapers/e667bc78-998b-4908-b109-0fe46c517474_Cisco%20WebEx%20Network%20Bandwidth.pdf.)

44. Defendant's use of a computing device for videoconferencing using its WebEx Meetings directly infringes, either literally or under the doctrine of equivalents, one or more claims of the '811 patent in violation of 35 U.S.C. § 271(a).

45. On information and belief, Defendant has and continues to directly infringe at least claim 7 of the '811 patent when its employees use the Accused Instrumentality on a computer owned by the Defendant (*e.g.* employee use of video conferencing or testing of the WebEx Meetings software) in the ordinary course of Defendant's business.

46. In the case of usage of the WebEx Meetings software by Defendant's employees (*e.g.* for business use or for testing), the computer is a computing device controlled by at least one of the employees and such computing device includes a CPU and executes the WebEx Meetings software (or at least a portion thereof).

47. Further, Defendant has and continues to directly infringe at least claim 7 of the '811 patent jointly with its licensees. For instance, Defendant is in a joint enterprise with the licensed users of the Accused Instrumentality, arising from the contractual rights granted to the users through their licenses, such that Defendant is liable for direct infringement based on such users' use of the Accused Instrumentality.

48. The Accused Instrumentality infringed and continues to infringe claim 7 of the '811 patent during the pendency of the '811 patent.

49. On information and belief, Defendant had actual knowledge of the '811 patent at least as early as July 10, 2020, the date of Defendant's receipt of Plaintiff's pre-service letter and complaint.

50. Upon information and belief, since CSI had knowledge of the '811 patent, CSI has induced and continues to induce others to infringe at least claim 7 of the '811 patent under 35 U.S.C. § 271(b) by, among other things, and with specific intent or willful blindness, actively aiding and abetting others to infringe, including but not limited to CSI's partners and customers, whose use of the Accused Instrumentality constitutes direct infringement of at least claim 7 of the '811 patent.

51. In particular, CSI's actions that aid and abet others such as their partners and customers to infringe include distributing the Accused Instrumentality and providing materials and/or services related to the Accused Instrumentality. On information and belief, CSI has engaged in such actions with specific intent to cause infringement or with willful blindness to the resulting infringement because CSI has had actual knowledge of the '811 patent and that its acts were inducing infringement of the '811 patent since CSI has had knowledge of the '811 patent.

52. In particular, Defendant licenses, or otherwise offers the Accused Instrumentality according to a number of different plans, including a free personal plan, as well as starter, plus and business plans, for which a fee is charged.³


53. To use WebEx Meetings, a licensee (or subscriber or customer) downloads the Accused Instrumentality onto an end user computing device. As an example, a subscriber having a computer device (*e.g.* desktop computer or mobile phone) with a browser may access the WebEx Meetings software via a Cisco Software as a Service (SaaS) platform. Software as a service (SaaS) is a delivery and licensing model in which software is accessed on the web via a subscription rather than installed on local computers. (*See* <https://www.cisco.com/c/en/us/products/software/what-is-software-as-a-service-saas.html>.)

³ *See, e.g.*, <https://www.webex.com/pricing/index.html>.

54. Defendant offers a mobile app version of WebEx Meetings to mobile device users. On its website, Defendant makes the following statements: “You can join a meeting from your computer, mobile device, phone, or a video system. Pick the one that works best for you” and “If you’re on the go, you can join your meeting from your Apple or Android phone, tablet or Apple watch using the Webex mobile app.” ([https://help.webex.com/en-US/article/gzbfsi/Join-a-Webex-Meeting-\(Slow-Channel\)#Cisco_Task_in_List_GUI.dita_3f65a08e-6f55-433d-a394-aba4ad638a0e](https://help.webex.com/en-US/article/gzbfsi/Join-a-Webex-Meeting-(Slow-Channel)#Cisco_Task_in_List_GUI.dita_3f65a08e-6f55-433d-a394-aba4ad638a0e).)

55. Defendant also offers WebEx Meetings as a desktop software application to subscribers. The WebEx Meetings desktop software application automatically downloads after starting or joining a WebEx meeting from a WebEx site. Defendant also provides installation instructions on its website for a user to download the WebEx Meetings desktop software app. (<https://help.webex.com/en-us/0tow9g/Download-the-Cisco-Webex-Meetings-Desktop-App>.) In addition, Defendant provides instructions on how to use the downloaded software:

Thanks for downloading
Cisco Webex Meetings.



Step 1
Double-click the webexapp.msi file you downloaded

Step 2
The Webex Meetings setup wizard will launch. Follow the instructions to set up.

Step 3
Once installed the app will launch automatically.

(<https://www.webex.com/downloads/downloads-thank-you-meetings.html>.)

56. Upon information and belief, since Defendant had knowledge of the '811 patent, Defendant is liable as a contributory infringer of the '811 patent under 35 U.S.C. § 271(c) by offering to sell, selling and importing into the United States videoconferencing software to be especially made or adapted for use in an infringement of the '811 patent. The Accused Instrumentality is a material component for use in practicing the '811 patent and is specifically made and is not a staple article of commerce suitable for substantial non-infringing use.

57. On information and belief, since CSI had knowledge of the '811 patent, CSI's infringement has been and continues to be willful.

58. Plaintiff has been harmed by Defendant's infringing activities.

59. Defendant's infringement has damaged and continues to damage and injure Plaintiff. Plaintiff's injury is irreparable and will continue unless and until Defendant is enjoined by this Court from further infringement.

JURY DEMAND

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Symmetrix demands a trial by jury on all issues triable as such.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff Symmetrix demands judgment for itself and against Defendant CSI as follows:

- A. An adjudication that CSI has infringed the '811 patent;
- B. An award of damages to be paid by CSI adequate to compensate Symmetrix for CSI's past infringement of the '811 patent, and any continuing or future infringement through the date such judgment is entered, including interest, costs, expenses and an accounting of all infringing acts including, but not limited to, those acts not presented at trial;

C. A declaration that this case is exceptional under 35 U.S.C. § 285, and an award of Symmetrix's reasonable attorneys' fees; and

D. An award to Symmetrix of such further relief at law or in equity as the Court deems just and proper.

Dated: November 30, 2021

DEVLIN LAW FIRM LLC

/s/ Jeffrey F. Craft

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