IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS

ANADEX DATA COMMUNICATIONS LLC, Plaintiff, v. SAMSUNG ELECTRONICS AMERICA, INC., Defendant.	**Civil Action No. 1:23-cv-1420** **JURY TRIAL DEMANDED**

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Anadex Data Communications LLC ("ADC" or "Plaintiff"), for its Complaint against Defendant Samsung Electronics America, Inc. ("Samsung" or "Defendant") alleges the following:

NATURE OF THE 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

1. Plaintiff is a limited liability company organized under the laws of the State of Texas with a place of business at 356 Greenwood Court, Villanova, Pennsylvania 19085.

2. Upon information and belief, Defendant Samsung Electronics America, Inc. is a corporation organized under the laws of the State of New York with a place of business at 12100 Samsung Boulevard, Austin, Texas 78754.

3. Upon information and belief, Defendant 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.

4. On information and belief, Defendant designs, develops, manufactures, sells, offers to sell, and/or imports products, devices, systems, and/or components of systems through certain accused instrumentalities (as discussed further below) that either infringe or support the infringement of the patent asserted in this action.

JURISDICTION AND VENUE

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

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

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

8. This Court has personal jurisdiction over Defendant 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 Defendant has regular and established places of business in this district. For instance, Defendant has manufacturing, research, and development facilities in this judicial district. For example, Defendant has a manufacturing facility located at 12100 Samsung Boulevard, Austin, Texas 78754 (*see* https://sec.wd3.myworkdayjobs.com/en-US/Samsung_Careers/details/XMLNAME--Click-Here-for-All-Samsung-Austin-Semiconductor-Open-Positions-_R66713?Location_Country=bc33aa3152ec42d4995f4791a106ed09&locations=189767dd6c9201c7ec227985a529067b) and research and development facilities located at 11044 Research

Blvd., Austin, Texas 78759 (*see* https://sec.wd3.myworkdayjobs.com/en-US/Samsung_Careers/details/Sr-Coherent-Interconnect-Micro-Architect-Logic-Designer_R75663-1?Location_Country=bc33aa3152ec42d4995f4791a106ed09&locations=189767dd6c9201d7fd9be686a529d47c) and 3900 N. Capital of Texas Hwy, Austin, Texas 78746 (*see* https://sec.wd3.myworkdayjobs.com/en-US/Samsung_Careers/job/3900-N-Capital-of-Texas-Hwy-Austin-TX-USA/System-IP-Design-Verification-Engineer---Memory-Controller_R75658-1?Location_Country=bc33aa3152ec42d4995f4791a106ed09).

BACKGROUND

The Invention

9. Marcin Zalewski is the inventor of U.S. patent No. 7,310,120 ("the '120 patent"). A true and correct copy of the '120 patent is attached as Exhibit 1.

10. The '120 patent resulted from the pioneering efforts of Marcin Zalewski (hereinafter "the Inventor") in the area of analog video conversion receivers. These efforts resulted in development of a receiver which could receive and convert an analogue video signal and control the display of the video frames at the time of the invention in 2004. At the time of these pioneering efforts, the most widely implemented technologies used to address controlling display of video signal frames were systems comprising a single frame buffer or systems comprising two frame buffers. In single frame buffer systems, output could be affected by interferences unless input and output timers were synchronized. This was problematic due to difficulties related to switching among input signals with different synchronization frequencies/phases. Systems with two frame buffers for double buffering where data was fetched into the first buffer and then copied to the second buffer required copying of large amounts of data. The Inventor conceived of the inventions claimed in the '120 patent as a way to reduce the interferences and allow a

conversion of video frames in such a way that the output frequency could be either lower or higher than the input frequency. (*See* Ex. A, the '120 patent, at 1:16-66.)

11. For example, the Inventor developed a receiver of analogue video signal having means for analogue video signal conversion.

Advantage Over the Prior Art

12. The patented invention disclosed in the '120 patent, provides many advantages over the prior art, and in particular improved the operations of analog video conversion receivers. (*See* Ex. A at 2:1-2.) One advantage of the patented invention is to eliminate the interferences and allowing a conversion of video frames frequency, in such a way that the output frequency can be either lower or higher than the input frequency. (*See* Ex. A at 1:61-24.)

13. Another advantage of the patented invention is the avoidance of picture interference, as is needed for the transfer of large amount of data between separate frame buffers. Thanks to data buffering in the queue of the frame buffers, and to the method of controlling it, problems with synchronization of the input signal frame timer with the of output signal frame timer, can be also avoided. (*See* Ex. A at 3:12-18.)

14. Because of these significant advantages that can be achieved through the use of the patented invention, the '120 patent presents significant commercial value for companies like Defendant. Indeed, aspects of the present invention are widely applicable to the use and function of video surveillance systems.

Technological Innovation

15. The patented invention disclosed in the '120 patent resolves technical problems related to of analog video conversion receivers, particularly problems related to the utilization of frame buffering. As the '120 patent explains, one of the limitations of the prior art as regards

analog video conversion receivers was that controlling display of video signal frames comprised using a single frame buffer or two frame buffers. In single frame buffer systems, output could be affected by interference unless input and output timers were synchronized. Systems with two frame buffers for double buffering where data was fetched into the first buffer and then copied to the second buffer required copying of large amounts of data. (*See* Ex. A at 1:29-47.)

16. The claims of the '120 patent do 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, the claims of the '120 patent recite inventive concepts that are deeply rooted in engineering technology and overcome problems specifically arising out of how to eliminate video signal display interferences and allow a conversion of video frames frequency, in such a way that the output frequency can be either lower or higher than the input frequency.

17. In addition, the claims of the '120 patent recite inventive concepts that improve the functioning of video surveillance systems, particularly improved performance of the video signal from a surveillance camera input to a user's output device.

18. Moreover, the claims of the '120 patent recite inventive concepts that are not merely routine or conventional use of analog video conversion receivers. Instead, the patented invention disclosed in the '120 patent provides a new and novel solution to specific problems related to improving the frequency of video frames.

19. And finally, the patented invention disclosed in the '120 patent does not preempt all the ways that analog video signal conversion may be used to improve analog video conversion receivers, nor does the '120 patent preempt any other well-known or prior art technology.

20. Accordingly, the claims in the '120 patent recite 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.

Prior Litigation

21. The '120 patent was previously litigated in the District Court for the Eastern District of Texas (*Anadex Data Communications LLC v. Lowe's Companies, Inc. et al.*, C.A. No. 4:21-cv-00523 (E.D. Tex.) and *Anadex Data Communications LLC v. Harbor Freight Tools USA, Inc.*, C.A. No. 4:21-cv-00524 (E.D. Tex.)); in the District Court for the Western District of Texas (*Anadex Data Communications LLC v. Lorex Technology, Inc.*, C.A. No. 6:20-cv-00246 (W.D. Tex.) and *Anadex Data Communications LLC v. Compassion Consulting & Distribution, LP, d/b/a Top Dawg Electronics*, C.A. No. 6:20-cv-00236 (W.D. Tex.)) (collectively "Prior Litigation"); and in the District Court for the Central District of California (*Anadex Data Communications LLC v. The Home Depot, Inc.*, C.A. No. 2:22-cv-01741 (C.D. Cal.).

COUNT I – INFRINGEMENT OF U.S. PATENT NO. 7,310,120

22. The allegations set forth in the foregoing paragraphs 1 through 22 are incorporated into this First Claim for Relief.

23. On December 18, 2007, U.S. Patent No. 7,310,120 ("the '120 patent"), entitled "RECEIVER OF ANALOGUE VIDEO SIGNAL HAVING MEANS FOR ANALOGUE VIDEO SIGNAL CONVERSION AND METHOD FOR CONTROL OF DISPLAY OF VIDEO FRAMES," was duly and legally issued by the United States Patent and Trademark Office. A true and correct copy of the '120 patent is attached as Exhibit 1.

24. Plaintiff is the assignee and owner of the right, title and interest in and to the '120 patent, including the right to assert all causes of action arising under said patents and the right to any remedies for infringement of them.

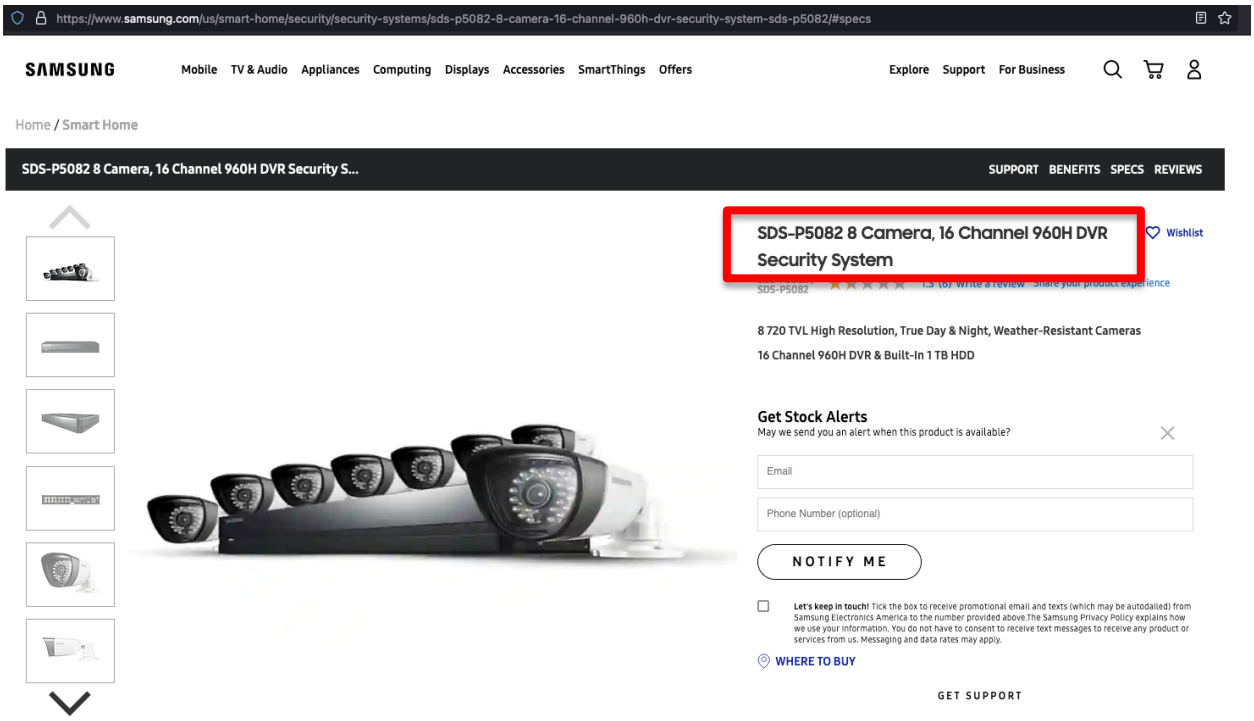
25. Upon information and belief, Defendant has and continues to directly infringe at least claim 1 of the ’120 patent by making, using, selling, importing and/or providing and causing to be used a products, specifically one or more security video camera DVR recording system(s) that have analog inputs as well as analog outputs, which by way of example include, without limitation, Defendant’s 16 Channel 960H DVR Security System, and similar systems (the “Accused Instrumentalities”).[1]

26. On information and belief, the Accused Instrumentalities infringe claim 1 of the ’120 patent.

27. Claim 1[pre] of the ’120 patent recites “A receiver of analogue video signal having means for analogue video signal conversion comprising . . . .”

28. The Accused Instrumentalities include a receiver of analogue video signal having means for analogue video signal conversion. For example, the security camera DVR systems of the Accused Instrumentalities comprise a receiver of analogue video signals having means for signal conversion:

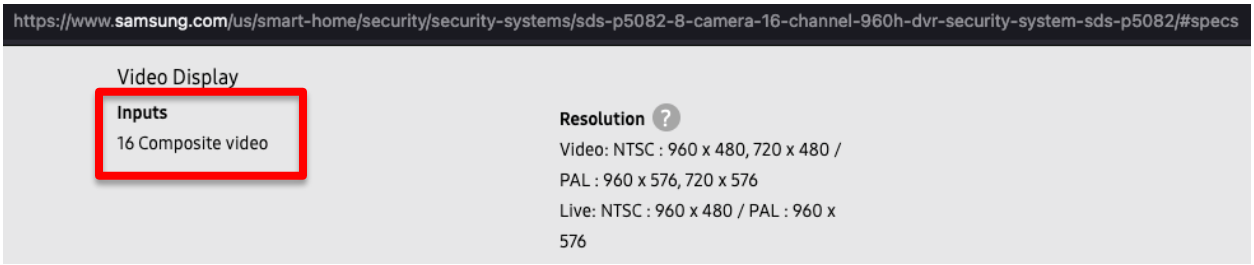
[1] Plaintiff notes that the listed “Accused Instrumentalities” are not intended to be exhaustive. The present list of “Accused Instrumentalities” is necessarily preliminary in that Plaintiff has not obtained substantial discovery from Defendant nor has Defendant disclosed any detailed analysis for its non-infringement position, if any. Thus, it would be improper for Defendant to withhold otherwise responsive information regarding unlisted products on the basis that those products are not specifically named herein.



(https://www.samsung.com/us/smart-home/security/security-systems/sds-p5082-8-camera-16-channel-960h-dvr-security-system-sds-p5082/ (annotated) (includes "Recording Compression H.264") (accessed May 5, 2023).)

29. Upon information and belief, the Accused Instrumentalities infringe claim 1[a] of the '120 patent. Claim 1[a] of the '120 patent recites "a receiving block for receiving a first analogue video signal of a first format . . . ."

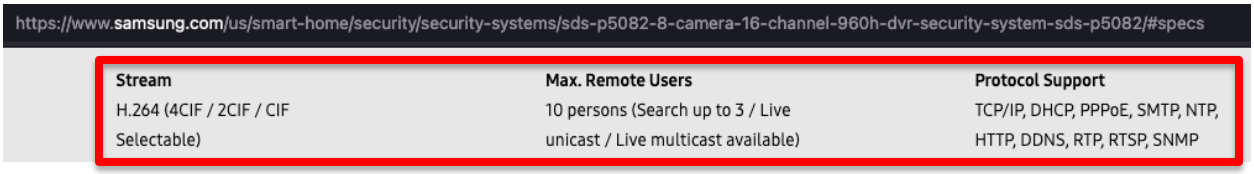
30. The Accused Instrumentalities include a receiving block for receiving a first analogue video signal of a first format. For example, cameras in the Accused Instrumentalities' systems transmit a 16-channel video signal to the receiver:



(https://www.samsung.com/us/smart-home/security/security-systems/sds-p5082-8-camera-16-channel-960h-dvr-security-system-sds-p5082/ (annotated).)

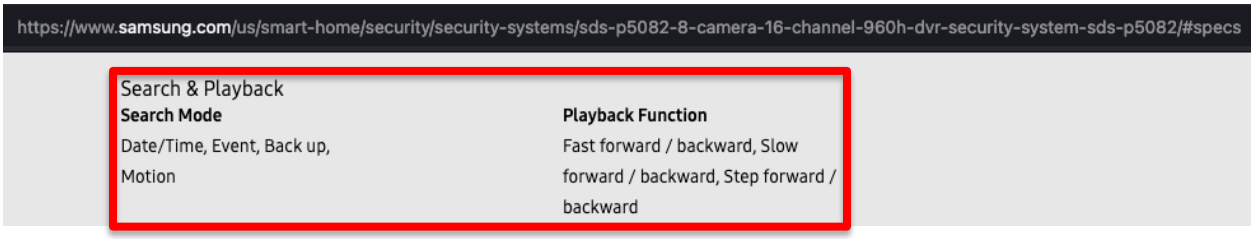
31. Upon information and belief, the Accused Instrumentalities infringe claim 1[b] of the '120 patent. Claim 1[b] of the '120 patent recites "a conversion block for conversion of the first analogue signal of the first format into a digital signal and connected to the receiving block . . . ."

32. The Accused Instrumentalities include a conversion block for conversion of the first analogue signal of the first format into a digital signal and connected to the receiving block. For example, the Accused Instrumentalities convert the analog signal to a digital signal for processing, manipulation, and/or storage. For example, the Accused Instrumentalities offer remote storage and access across a network,:



(https://www.samsung.com/us/smart-home/security/security-systems/sds-p5082-8-camera-16-channel-960h-dvr-security-system-sds-p5082/ (annotated).)

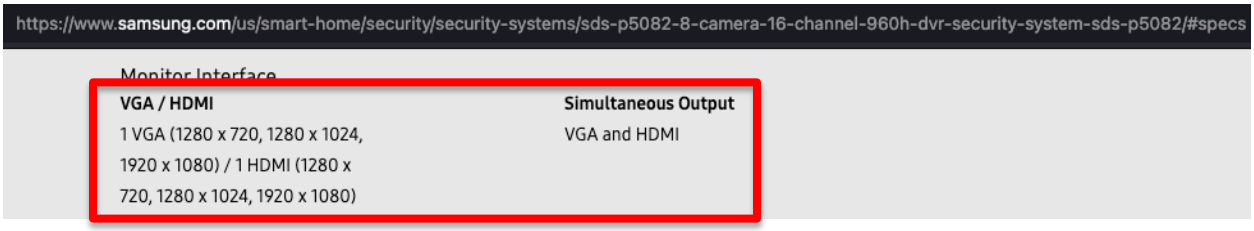
33. As an additional example, the camera auto detect and search features convert an analog signal to a digital signal for search functionality:



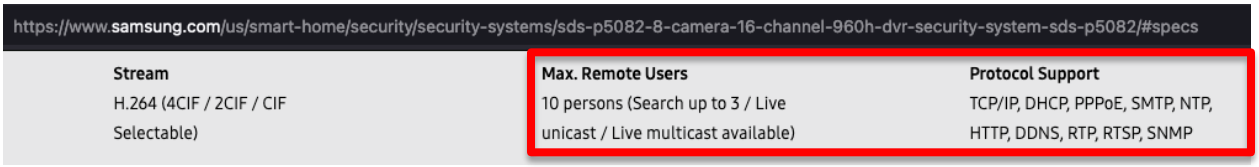
(https://www.samsung.com/us/smart-home/security/security-systems/sds-p5082-8-camera-16-channel-960h-dvr-security-system-sds-p5082/ (annotated).)

34. Upon information and belief, the Accused Instrumentalities infringe claim 1[c] of the '120 patent. Claim 1[c] of the '120 patent recites "a buffer controller of frames included in the digital signal connected to the conversion block and having frame buffers organized as a two-way list, a decoding frame controller and a displaying frame controller . . . ."

35. The Accused Instrumentalities include a buffer controller of frames included in the digital signal connected to the conversion block, and having frame buffers organized as a two-way list, a decoding frame controller and a displaying frame controller. For example, the Accused Instrumentalities offer user-adjustable video output resolution and live speed display, as well as user-adjustable record rate:



(https://www.samsung.com/us/smart-home/security/security-systems/sds-p5082-8-camera-16-channel-960h-dvr-security-system-sds-p5082/ (annotated).)



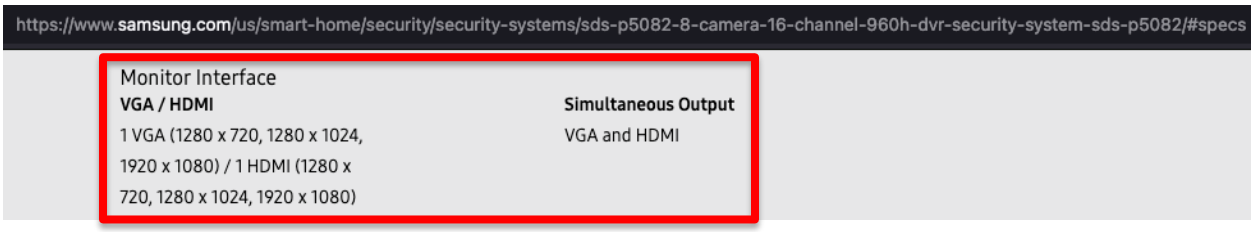
(https://www.samsung.com/us/smart-home/security/security-systems/sds-p5082-8-camera-16-channel-960h-dvr-security-system-sds-p5082/ (annotated).)

36. This type of functionality necessitates separate frame buffers for decoding and displaying, respectively, so that the frame buffers are organized as a two-way list. For instance, the two-way list potentially comprises a decoding frame buffer and displaying frame buffer,

which would enable different rates for decoding and display, or different resolutions for decoding and display.

37. Upon information and belief, the Accused Instrumentalities infringe claim 1[d] of the '120 patent. Claim 1[d] of the '120 patent recites "a video coder for transforming the digital signal into a second analogue signal of a second format . . . ."

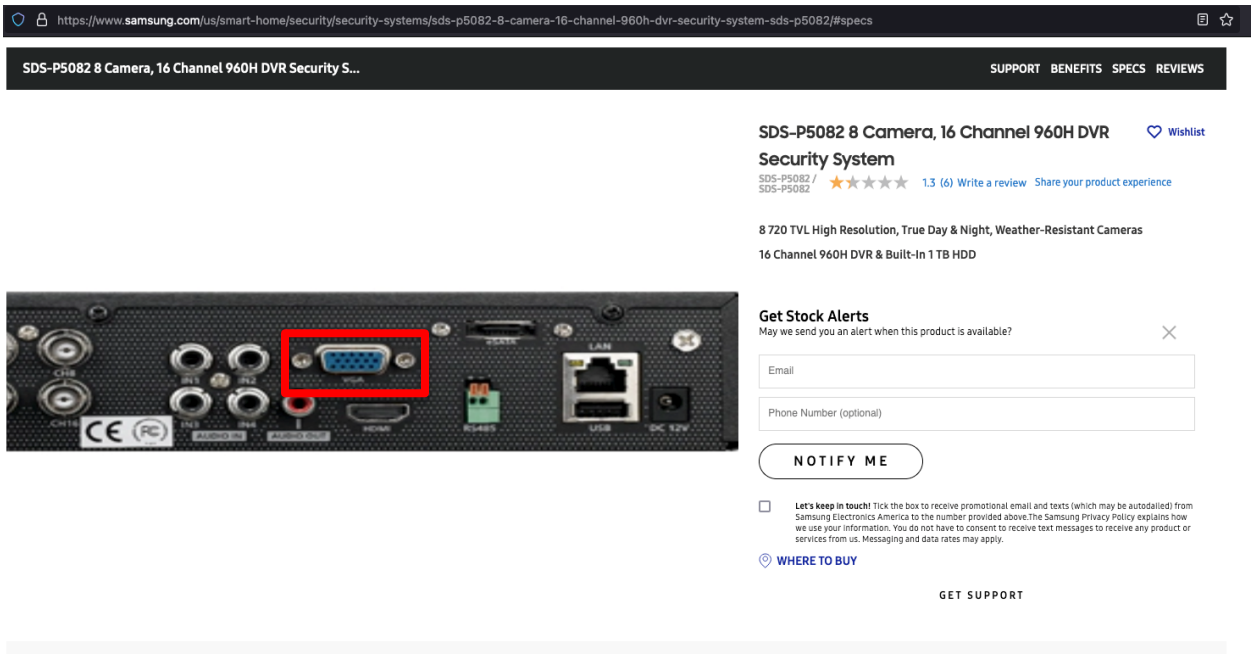
38. The Accused Instrumentalities include a video coder for transforming the digital signal into a second analogue signal of a second format. For example, the Accused Instrumentalities convert the digital signal to a second analogue signal for display, which may be a VGA signal:



(https://www.samsung.com/us/smart-home/security/security-systems/sds-p5082-8-camera-16-channel-960h-dvr-security-system-sds-p5082/ (annotated).)

39. Upon information and belief, the Accused Instrumentalities infringe claim 1[e] of the '120 patent. Claim 1[e] of the '120 patent recites "a receiver for displaying the second analogue signal of the second format . . . ."

40. The Accused Instrumentalities include a receiver for displaying the second analogue signal of the second format. For example, the receiver block, which is located after the coder, comprises the electronics associated with preparing the second analogue coded signal disclosed in limitation 1[d] for display (e.g., VGA).

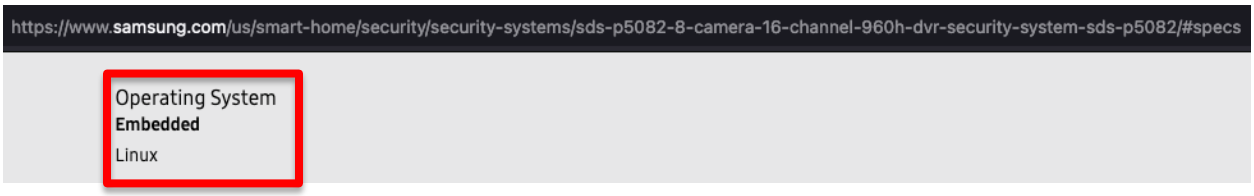


(https://www.samsung.com/us/smart-home/security/security-systems/sds-p5082-8-camera-16-channel-960h-dvr-security-system-sds-p5082/ (annotated).)

41. A user is then able to view the second analogue signal of the second format, for example on a monitor (*i.e.*, receiver).

42. Upon information and belief, the Accused Instrumentalities infringe claim 1[f] of the '120 patent. Claim 1[f] of the '120 patent recites "a processor for data processing and controlling the receiving block, the conversion block, the buffer controller, the video coder and the receiver."

43. The Accused Instrumentalities include a processor for data processing and controlling the receiving block, the conversion block, the buffer controller, the video coder and the receiver. For example, the Accused Instrumentalities comprise a computer that runs, *inter alia*, the "Linux" operating system, functions based on installed firmware, includes memory for frame buffering and other functions (i.e., CPU).



(https://www.samsung.com/us/smart-home/security/security-systems/sds-p5082-8-camera-16-channel-960h-dvr-security-system-sds-p5082/ (annotated).)

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

JURY DEMAND

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

PRAYER FOR RELIEF

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

A. An adjudication that Defendant has infringed the '120 patent;

B. An award of damages to be paid by Defendant adequate to compensate Plaintiff for Defendant's past infringement of the '120 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 Plaintiff's reasonable attorneys' fees; and

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

Dated: November 17, 2023

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