

**UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT**

2007-1097

ELBEX VIDEO, LTD.,

Plaintiff-Appellant,

v.

SENSORMATIC ELECTRONICS CORPORATION,

Defendant-Appellee.

Michael I. Rackman, Gottlieb, Rackman & Reisman, P.C., of New York, New York, argued for plaintiff-appellant. With him on the brief was Steven Stern.

Mark L. Levine, Bartlit, Beck, Herman, Palenchar & Scott LLP, of Chicago, Illinois, argued for the defendant-appellee. With him on the brief was Alan E. Littmann.

Appealed from: United States District Court for the Southern District of New York

Senior Judge Richard Owen

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DECIDED: November 28, 2007

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Before DYK and MOORE, Circuit Judges, COTE, District Judge.\*

Opinion for the court filed by Circuit Judge MOORE. Dissenting opinion filed by District Judge COTE.

Elbex Video, Ltd. (Elbex) appeals from the grant of summary judgment in favor of Sensormatic Electronics Corp. (Sensormatic) by the United States District Court for the Southern District of New York. Elbex Video, Ltd. v. Sensormatic Elecs. Corp., No. 04-CIV-9530 (RO), 2006 WL 2588139 (Sept. 6, 2006) (SJ Order). The district court determined that Sensormatic's accused closed circuit television (CCTV) systems do not infringe claim 1 of United States Patent No. 4,989,085 (the '085 patent). We affirm-in-part, reverse-in-part, and remand.

## I. BACKGROUND

### A. *The '085 Patent*

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\* Honorable Denise L. Cote, District Judge, United States District Court for the Southern District of New York, sitting by designation.

The '085 patent relates to CCTV systems. CCTV systems include a supervisory station and several remote-controllable television cameras. '085 patent, col.1 ll.13-15. The supervisory station includes a monitor for receiving and displaying video signals received from the remote-controllable television cameras, a device for controlling the operation of the television cameras, and a switching device that permits a user to select a camera to control with the controlling device. Id. at col.1 ll.16-24. In conventional systems, the switching device includes two switches: one for video and one for the control signals. See id. at col.1 ll.29-32. When the switching device is properly configured, the controlling device can control “the operation and coordinates of the television camera, such as up-down (tilting), left-right (panning), far-near (focusing) and wide-tele (zooming)” of the desired camera. Id. at col.1 ll.18-21; see also id. at col.1 ll.25-28; col.6 ll.39-44.

According to the '085 patent, an operator using a conventional system might inadvertently control the wrong camera, sometimes unknowingly. The '085 patent seeks to solve this problem by employing a unique addressing scheme that includes using cameras to generate a first code signal unique to each camera in the system. Id. at col.1 ll.55-59; col.3 l.29-col.4 l.7. That first code signal is sent, along with the video signal, to a receiving device located at the supervising station, where the first code signal is extracted by a decoder. Id. at col.4 ll.8-29. After the receiving device receives a first code signal, that signal can be input into a “controlling means” that generates a “second code signal corresponding to the received [first] code signal” and may transmit that second code signal along with control commands to the television camera. Id. at col. 1 ll.61-67; col.2 ll.10-19; col.4 ll.30-41. A second decoder may filter the second

code signal from the control signals and a comparison may be performed to determine if the second code signal “coincides with the camera code.” Id. at col.2 ll.27-31. Thus, the control signals only control the camera receiving the control signals when the second code signal matches the camera code. Id. at col.2 ll.32-38.

Claim 1, the sole independent claim, provides:

A closed circuit television apparatus comprising:

[1] a plurality of remote-controlled television cameras for generating video signals, each camera including a circuit for generating 1st code signals allotted to a respective television camera;

[2] receiving means for receiving said video signals and said 1st code signals;

[3] switching means for selecting a television camera to be connected to said receiving means;

[4] said receiving means including a monitor for displaying images corresponding to the video signals received in said receiving means; and

[5] controlling means for controlling said television camera;

[6] said controlling means including control and code generator means for generating control signals to control said television camera and 2nd code signals corresponding to the 1st code signals received in said receiving means and for transmitting said control signals and said 2nd code signals to said television camera;

[7] each television camera further including a command circuit receiving said control signals and said 2nd code signals generated in said controlling means and operating said television camera in accordance with said control signals when said 2nd code signals coincide with a code allotted to said television camera.

'085 patent, col.7 l.28-col.8 l.14 (emphases and limitation numbers added).

#### *B. Procedural Background*

Elbex filed suit against Sensormatic on December 3, 2004 alleging that Sensormatic’s CCTV systems infringed claim 1 of the '085 patent. Almost two years later, the district court granted Sensormatic’s motion for summary judgment of

noninfringement. SJ Order, 2006 WL 2588139. The district court gave two independent reasons for its decision. First, the district court found that Sensormatic's CCTV systems did not satisfy the addressing limitations (i.e., limitations [1], [6], and [7]) of claim 1 and therefore could not, as a matter of law, infringe any claim of the '085 patent. Id. at 2006 WL 2588139 at \*2. The district court found that

*None* of the methods Sensormatic uses to address commands to cameras relies upon code signals or addresses sent from the camera ("1st code signals") or code signals or addresses that the controller generates based on any information from the camera ("2nd code signals"). Rather, Sensormatic relies on addresses that are generated in the controller itself based on the number of the video input to which the camera being displayed is connected. Sensormatic's products therefore lack the "2nd code signal" that "corresponds" to a "1st code signal," as required by claim 1.

Id. (emphasis in original).

The district court's alternate rationale concerned the claim limitation "receiving means for receiving said video signals and said 1st code signals." The district court found that during prosecution before the United States Patent and Trademark Office (PTO) the inventor had limited the "receiving means" to a "monitor" that receives the video and first code signal. SJ Order, 2006 WL 2588139 at \*2. The district court concluded that "whether by mistake or otherwise," the inventor "agreed" to limit the "'receiving means' to a structure through which a video monitor receives the 1<sup>st</sup> code signal from a camera." Id. at \*2 n.4. This "agreement" appears in a response to an office action:

To ensure a no-error operation the camera generates a code signal, which is received by the monitor, based upon which, a code is sent back to the camera along with the control signal. Only coincidence of the original camera code and the code returned to the camera will allow the control signals to operate the camera. The principle of the present invention is, therefore a transmission of a code from the camera to the monitor of the receiving means and back to the camera.

U.S. Pat. App. Serial No. 07/270,577, Amendment & Remarks, at 5 (filed Jan. 24, 1990) (hereafter Amendment & Remarks) (emphases in original). Although the district court acknowledged that obvious errors in statements made before the PTO are not necessarily binding, it concluded that this statement was binding. SJ Order, 2006 WL 2588139 at \*2 n.4 (“Elbex cannot have it both ways—having received the benefit of its representation in 1990, Elbex cannot be permitted now to argue that the claims were not limited by these statements.”). The district court implicitly concluded that the prosecution statements would not have been viewed by one of ordinary skill in the art to be obvious errors. Therefore, the district court held that summary judgment was also appropriate because “[i]n Sensormatic’s CCTV systems . . . no data is ever sent from the camera to the monitor.”<sup>1</sup> Id. at \*2.

Elbex filed a timely appeal. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

## II. DISCUSSION

We review a district court’s grant of summary judgment of noninfringement without deference and draw all reasonable factual inferences in favor of the non-movant. See Cortland Line Co. v. Orvis Co., 203 F.3d 1351, 1355-56 (Fed. Cir. 2000). “This court decides for itself whether ‘the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue of material fact and that the moving party is entitled to a judgment as a matter of law.’” Invitrogen Corp. v. Biocrest Mfg., Inc., 327 F.3d 1364, 1367 (Fed. Cir. 2003) (quoting Fed. R. Civ. P. 56(c)).

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<sup>1</sup> By “data” the district court meant “first code signals” were not sent to the monitor. Of course, data in the form of video signals are sent from the cameras to the monitor.

A determination of infringement is a two-step inquiry: first, the claims are construed, and second, the properly construed claims are applied to the accused devices. See, e.g., Acumed L.L.C. v. Stryker Corp., 483 F.3d 800, 804 (Fed. Cir. 2007). Claim construction is a question of law that we review de novo. See, e.g., Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1454 (Fed. Cir. 1998) (en banc).

*A. Claim Construction: “Receiving Means”*

The claimed CCTV system requires a “receiving means for receiving said video signals and said first code signals.” Because this limitation uses “means for” there is a presumption that the claim invokes 35 U.S.C. § 112, ¶ 6. See Biomedino L.L.C. v. Waters Techs. Corp., 490 F.3d 946, 950 (Fed. Cir. 2007). Neither party contends that the presumption has been rebutted; we agree that it has not. Our case law provides the appropriate framework for construing a claim limitation expressed in means-plus-function format. “First, the court must determine the claimed function.” Applied Med. Res. Corp. v. U.S. Surgical Corp., 448 F.3d 1324, 1332 (Fed. Cir. 2006). Once the function has been identified, we turn to the specification to determine which structures disclosed in the specification perform that function. Id.

The function recited in the “receiving means” limitation is the reception of video signals and first code signals. As for the structure, the specification states that

[t]he receiving device 16 includes a low-pass filter 54 [sic 52] which allows the video signals to pass and prevents the high frequency output signals of the controller device 14 from passing. The output signals of the filter 54 [sic 52] are supplied to a television receiver or monitor 58 [sic 56] via an interface 56 [sic 54] which superposes the display signals from the controller 46 on the output signals of the filter 54 [sic 52].

'085 patent, col.5 ll.55-61. The receiving device (16) is depicted in Figure 1 of the '085 patent, as reproduced below.

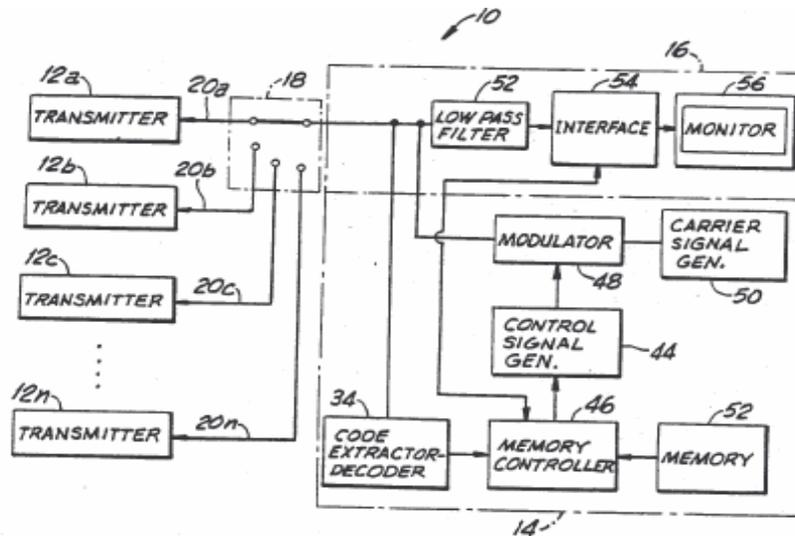


FIG. 1

'085 patent, Figure 1. The receiving means includes an input line, a low pass filter, an interface and a television receiver or monitor and any equivalents thereof under § 112, ¶ 6.

Claim terms are entitled to a “heavy presumption” that they carry their ordinary and customary meaning to those skilled in the art in light of the claim term’s usage in the patent specification. See Superguide Corp. v. DirectTV Enters. Inc., 358 F.3d 870, 874 (Fed. Cir. 2004); Omega Eng’g, Inc. v. Raytek Corp., 334 F.3d 1314, 1323 (Fed. Cir. 2003). However, when a patent applicant surrendered claim scope during prosecution before the PTO, the ordinary and customary meaning of a claim term may not apply. This doctrine of prosecution disclaimer has been “adopted . . . as a fundamental precept in our claim construction jurisprudence.” Omega Eng’g, 334 F.3d at 1323 (citing cases). Prosecution disclaimer “promotes the public notice function of the intrinsic evidence and protects the public’s reliance on definitive statements made during prosecution.” Id. at 1324. This doctrine does not apply “where the alleged

disavowal is ambiguous;” the disavowal must “be both clear and unmistakable” to one of ordinary skill in the art. Id. at 1326; Seachange Int’l, Inc. v. C-COR Inc., 413 F.3d 1361, 1373 (Fed. Cir. 2005) (“A disclaimer must be clear and unambiguous.”); Rambus Inc. v. Infineon Techs. AG, 318 F.3d 1081, 1089-91 (Fed. Cir. 2003) (finding no clear disclaimer because the statement made was “facially inaccurate” in light of the remainder of the prosecution history); Biotec Biologische Naturverpackungen GmbH & Co. KG v. Biocorp, Inc., 249 F.3d 1341, 1348 (Fed. Cir. 2001) (finding no clear disclaimer because “a person of reasonable intelligence would not be misled into relying on the erroneous statement, for it is contrary not only to the plain language of the claims and the specification, but also to other statements in the same prosecution document”); Hockerson-Halberstadt, Inc. v. Avia Group Int’l, Inc., 222 F.3d 951, 956-57 (Fed. Cir. 2000) (finding disavowal because “reasonable competitor . . . would have no reason to believe that a mistake was made”); Desper Prods., Inc. v. QSound Labs., Inc., 157 F.3d 1325, 1334-36 (Fed. Cir. 1998) (concluding prosecution statements were clear and unmistakable disclaimer because they were entirely consistent with written description and knowledge of those skilled in the art).

In the present case, the district court found that the inventor limited the “receiving means” that receives the first code signal to a “monitor” that receives the first code signal. Implicit in its determination is a finding that the inventor clearly and unmistakably surrendered any claim scope between the “receiving means” that receives first code signals as expressly recited in the claims, and a “monitor” that receives first code signals. We cannot agree. The statements to the effect that the code signal is received by the monitor did not amount to a clear and unmistakable surrender of claim scope.

First, the statement in the prosecution history is unsupported by even a shred of evidence from the specification. The specification never suggests that the monitor of the receiving means receives first code signals and returns a corresponding code to the cameras. Figure 1 above shows that the first code signal would be received by the receiving means 16 on an input line from the transmitter and then would travel to the controlling means 14. After receiving the first code signal, the controlling means decodes and manipulates the first code signal and then generates the second code signal which is transmitted back to the camera along with the control signals via the receiving means. See, e.g., '085 patent, col.1 ll.62-67; col.2 ll.32-36; col.2 ll.39-42. As Figure 1 shows, the receiving means receives the first code signal, but the monitor does not. There is nothing in the specification to suggest that the first code signal ever reaches the monitor.

Second, read in isolation, the statement in the prosecution history could be argued to be a disclaimer. When the prosecution history as a whole is considered, the inventor's response to the PTO is not as clear. Because of the potential for such ambiguities, we have recognized that "because the prosecution history represents an ongoing negotiation between the PTO and the applicant . . . it often lacks the clarity of the specification and thus is less useful for claim construction purposes." Phillips v. AWH Corp., 415 F.3d 1303, 1317 (Fed. Cir. 2005). In this case, two paragraphs after the alleged disclaimer, the inventor also included the following statement to distinguish a reference relied on by the PTO examiner:

The Bellman reference fails to suggest that the code received by a display device is sent back to the camera along with the control signal and that the camera is operated by control signals only upon the coincidence of the original camera code with the code returned to the camera.

Amendment & Remarks at 6. The specification equates the “display device” and the “receiving device.” See '085 patent, col.3 l.4 (“ . . . a displaying device or receiving device 16 . . .”). This statement, unlike the alleged disclaimer, is fully supported by the written description and provides further indication that the earlier statement in the same document was not a clear and unmistakable surrender.

Third, reading the specification and remainder of the intrinsic record as a whole would lead those skilled in the art to the conclusion that the inventor’s statement that the monitor received the first code signals and, “based upon” that code, transmits a second code signal “back to the camera” was not a clear and unmistakable surrender of claim scope. Amendment & Remarks at 5-6. This prosecution statement if taken literally would result in an inoperable system. Even if the monitor contained the necessary hardware to receive and generate a second code signal corresponding to the first code signal to be sent back to the cameras (a technological concept not at all supported by the specification), the second code signals would not reach the cameras. The low pass filter is positioned between the monitor and the cameras. The sole purpose of that filter is to “prevent the high frequency output signals [i.e., the “second code signals”] of the controller device 14 from passing.” '085 patent, col.5 ll.55-58. Hence, the second code signal would be filtered out before it ever reached the camera. Even Sensormatic’s own technical witness testified that he “ha[d] trouble figuring out how [transmitting the code signals to and from the monitor] would work.”

For a prosecution statement to prevail over the plain language of the claim, the statement must be clear and unmistakable such that the public should be entitled to rely on any “definitive statements made during prosecution.” Omega, 334 F.3d at 1324.

On this unique amalgamation of facts, including (1) the absence of support in the specification or drawings for a monitor that receives code signals from and returns code signals to the cameras; (2) the ambiguity created by other statements in the same prosecution document; (3) the fact that Sensormatic's own technical witness did not understand how the system would operate consistent with the erroneous statement; and (4) the inoperability of a device constructed in accordance with the incorrect statement, we conclude that this is not a case of prosecution disclaimer. One of skill in the art would understand the claim to cover a receiving means (not limited to a monitor) for receiving the video signals and the first code signals.

B. *Infringement*

In light of our construction of the receiving means limitation, we conclude that the district court erred in granting summary judgment of noninfringement to Sensormatic because the monitors in its CCTV systems do not receive a first code signal.

The district court also concluded that summary judgment was appropriate because Sensormatic's CCTV systems do not include a controller that generates a second code signal corresponding to a first code signal that is sent by the camera to the controller. "Rather," said the district court, "in Sensormatic's systems, the controller addresses commands to the cameras based upon their respective video input numbers (which are set independently when the installer hooks up the camera's video cable to the back of the controller), not based upon the thumbwheel address of the camera." SJ Order, 2006 WL 2588139 at \*2; see also id. at \*2 n.2. The district court did not independently address any of the specific systems identified by Elbex on appeal, namely the RS-422 Systems, the SensorNet Systems, or the Intellix IP systems.

Because the parties' arguments differ depending on the protocols used by the Sensormatic CCTV systems, we address each system separately.

1. Sensormatic Systems Using RS-422 Protocol

Certain Sensormatic CCTV systems employ an RS-422 protocol for communicating between the controller and the cameras. Elbex contends that when the systems using the RS-422 protocol are powered up, the cameras transmit an unsolicited message (i.e., a "Dome Power-Up" message) to the controller including the camera's address. According to Elbex, this message corresponds to the first code signal limitation of claim 1. Elbex further contends that when this unsolicited message is received by the controller, the controller sends a request-for-status command back to the camera based on the address provided with the "Dome Power-Up" message. This addressing, according to Elbex, meets the "second code signal" limitation of the claim.

Sensormatic argues that its systems employing the RS-422 protocol do not infringe claim 1 because claim 1 requires "operating said television camera in accordance with said control signals when said 2nd code signals coincide with a code allotted to said television cameras," '085 patent, col.8 ll.11-14, and Sensormatic's RS-422 systems do not have that functionality. According to Sensormatic, "after the camera is powered on, the acknowledgement response sent from the controller to the camera does not cause any changes in the operation of the camera."

We agree with Sensormatic that there are no genuine issues of material fact and that its CCTV systems employing the RS-422 protocols do not infringe as a matter of law. To the extent that the Sensormatic systems using the RS-422 protocol receive a power-on message from the cameras and acknowledge receipt of that message, the

camera's "command circuit" does not perform the "operating" function required by claim 1 based on the acknowledgement of the "Dome Power-Up" message. Therefore, we affirm the district court's grant of summary judgment with respect to the Sensormatic systems using the RS-422 protocols.

## 2. Sensormatic Systems Using the SensorNet Protocols

Elbex contends that the Sensormatic CCTV systems employing the SensorNet protocols infringe because the controller can receive "alarm messages" by way of a camera in the system and return a message, using the originating camera's address, instructing that camera to stop sending the alarm message. Mr. Elberbaum, the inventor of the '085 patent, Elbex's founder, and expert, submitted an affidavit describing how cameras in CCTV systems may include inputs to receive messages from alarms on doors and windows. According to Mr. Elberbaum, the alarm inputs connect the cameras to external alarm sensors and "an alarm signal . . . is sent to the controller when a door is opened or when an intruder is attempting to break in through a window." Thus, Elbex's position is that the alarm signal includes camera address information and satisfies the first code signal limitation of claim 1. When the controller acknowledges receipt of the alarm message it uses a second code signal corresponding to the first code signal. The controller, according to Elbex, operates the camera by instructing the camera to stop sending the alarm message.

Sensormatic contends that its cameras do not send a first code signal from the camera that is used by the controller to generate a second code signal. According to Sensormatic, to infringe claim 1 "a Sensormatic CCTV camera must at a minimum send a '1<sup>st</sup> code signal' to the controller *prior to* receiving any communication through a '2nd

code signal' from the controller." Sensormatic Br. at 37. This does not occur in Sensormatic's systems using the SensorNet protocol because another device must poll the cameras to request information from them. Moreover, according to Sensormatic, the camera acts as a server and the controller acts as a client. Thus, Sensormatic contends that it does not infringe claim 1 of the '085 patent.

We agree with the district court that there are no genuine issues of material fact with respect to the Sensormatic CCTV systems using the SensorNet protocols and conclude that Sensormatic was entitled to a judgment of noninfringement as a matter of law. The documents describing the use of the SensorNet protocol state that the camera acts as a server and the controller acts as a client. In this configuration, the client must have the correct address information to properly send a message, whereas the server can return the message based on the information received from the client. Thus, in the terms used by the '085 patent, it would be the camera that would receive an address or "first code signal" from the controller and would generate a response to the controller based on the "first code signal." Elbex's attempts to show that the client/server relationship between the camera and the controller are merely exemplary fail because the testimony Elbex relies on only refers to acknowledgements sent when "contacting settings change," i.e., when a switch is reset, and do not pertain to using "control signals" to "operat[e] said television camera in accordance with said control signals when said 2nd signals coincide with a code allotted to said television camera." '085 patent, col.8 ll.11-14. Therefore, we agree with the district court that summary judgment of noninfringement with respect to the Sensormatic CCTV systems using the SensorNet protocols was appropriate.

### 3. The Sensormatic Systems Using the Intellix IP Protocol

Elbex contends that the Sensormatic systems using the Intellix IP protocols infringe because those systems use an internet protocol (IP) address as part of a data packet received from a camera to address return messages, including control signals, to that camera. Sensormatic disagrees, stating that the camera addresses are entered manually into the controller, and are not sent by the camera.

We have reviewed the record related to the Sensormatic CCTV systems using the Intellix IP protocols and have determined that Sensormatic has not met its burden of showing that there are no disputed issues of fact and that it is entitled to judgment as a matter of law. It is unclear on this record whether address information within the data packets sent from a camera to the controller is used by the controller to address control signals to the camera. This fact is both material and disputed. Therefore, we reverse the grant of summary judgment with respect to the Sensormatic systems using the Intellix IP protocol and remand for further proceedings consistent with this opinion.

### III. CONCLUSION

The district court erred in its construction of “receiving means” as being limited to a “monitor” based on statements made by the inventor to the PTO during prosecution of the '085 patent. We agree with the district court’s grant of summary judgment of noninfringement with respect to the RS-422 and SensorNet systems, but we disagree with the district court’s grant of summary judgment of noninfringement with respect to the Intellix IP systems. Therefore, the judgment of the district court is

AFFIRMED-IN-PART, REVERSED-IN-PART, and REMANDED.

#### IV. COSTS

Each party shall bear its own costs.

# United States Court of Appeals for the Federal Circuit

2007-1097

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SENSORMATIC ELECTRONICS CORPORATION,

Defendant-Appellee.

COTE, District Judge, dissenting.

I respectfully dissent. I believe that when the prosecution history and the patent are considered together, the evidence is clear and unambiguous that Elbex's reference to a "monitor" in its response to the PTO Office Action was a strategic choice and an unmistakable surrender of claim scope. Elbex made significant revisions to Claim 1 in what became the '085 patent in order to obtain the patent, and is now trying to recapture what it chose to abandon in the proceedings before the PTO. I would affirm.