UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOHN J. UEBBING

Appeal 2007-0597
Application 10/423,523
Technology Center 2600

Decided: May 2, 2007

Before KENNETH W. HAIRSTON, HOWARD B. BLANKENSHIP, and ALLEN R. MACDONALD, *Administrative Patent Judges*.

HAIRSTON, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134 from a Final Rejection of claims 1 to 20. We have jurisdiction under 35 U.S.C. § 6(b).

Appellant has invented a camera system and method in which a low-resolution camera with a plurality of image sensing regions controls the powering on of a plurality of high resolution cameras. Each of the high-

resolution cameras is associated with a set of the plurality of the image sensing regions. The low-resolution camera detects motion based on sensed images, identifies a set of the image sensing regions based on the motion, and powers on the high-resolution camera associated with the identified set of image sensing regions. (Figure 1; Specification 3 and 15).

Claim 1 is representative of the claims on appeal, and it reads as follows:

1. A camera system, comprising:

a first camera having a low-resolution image sensor with a plurality of image sensing regions;

a plurality of high-resolution cameras, each of the high-resolution cameras associated with a set of the plurality of image sensing regions; and

wherein the first camera is configured to detect motion based on sensed images, identify a set of the image sensing regions based on the motion, and power on the high-resolution camera associated with the identified set of image sensing regions.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Lee	US 6,392,632	May 21, 2002
Hunter	US 2003/0025800 A1	Feb. 6, 2003
Smith	US 2004/0001149 A1	Jan. 1, 2004 (filed Jun. 28, 2002)
Westfield	US 6,677,979	Jan. 13, 2004 (filed Jun. 12, 2001)

The Examiner rejected claims 1, 3, 10, 13, 14, and 16 under 35 U.S.C. § 102(e) based upon the teachings of Hunter. The Examiner rejected claims

2, 4 to 6, 12, 15, and 17 under 35 U.S.C. § 103(a) based upon the teachings of Hunter and Smith, and the Examiner rejected claims 7 to 9, 11, and 18 to 20 under 35 U.S.C. § 103(a) based upon the teachings of Hunter, Westfield and Lee.

Appellant contends the video system described by Hunter does not teach that "each of a plurality of high-resolution cameras are associated with a set of image sensing regions of a low-resolution image sensor" as claimed (Br. 6). Appellant also contends that the video and surveillance systems described by Hunter, Smith, Westfield and Lee do not teach or suggest a low-resolution camera powering on or powering off a high-resolution camera based on detected motion in a sensed region (Br. 8 to 17).

We hereby reverse the anticipation rejection of claims 1 and 3, and sustain the anticipation rejection of claims 10, 13, 14, and 16. With respect to the obviousness rejections, we hereby reverse the obviousness rejections of claims 2, 4 to 9, 11, and 20, and sustain the obviousness rejections of claims 12, 15, and 17 to 19.

ISSUE (1)

Does Hunter teach that each of a plurality of high-resolution cameras is associated with a set of image sensing regions of a low-resolution image sensor?

FINDINGS OF FACT (1)

As indicated *supra*, the low-resolution camera 104 in the system described by Appellant controls the powering on of a plurality of high-resolution cameras 106A to 106O based on sensed motion in image sensing regions. The-low resolution camera 104 covers a plurality of image sensing

regions, but each of the high-resolution cameras 106A to 106O only covers a set of the noted plurality of image sensing regions. The low-resolution camera 104 is configured to detect motion based on sensed images, identify a set of the image sensing regions based on the motion, and power on the high-resolution camera associated with the identified set of image sensing regions.

Hunter describes a plurality of cameras 10 operating under the control of a control unit 14 (Figure 1; paragraphs 0025 and 0026). Each of the cameras 10 is adapted to operate in two different modes (i.e., low-resolution and high-resolution) (paragraph 0026). Thus, Hunter has at least one first camera 10 having a low-resolution image sensor, and a plurality of high-resolution cameras. Each of the cameras 10 has an image sensing region in its field of view (paragraph 0026). If each of the low-resolution cameras has its own field of view, then none of the low-resolution camera's fields of view covers "a plurality of image sensing regions" as set forth in claim 1. If none of the low-resolution cameras covers "a plurality of image sensing regions," then none of the high-resolution cameras is associated with "a set of the plurality of image sensing regions."

Westfield and Lee were applied by the Examiner to "teach that high and low CMOS image sensors are used for motion detection and to make low cost equipment (Westfield: column 5, lines 5-10, Lee: column 10, lines 21-43)" (Answer 6).

Smith was applied by the Examiner because "hard drives or storage media, which are well known in the art, are used to store large amounts of digital data (Smith: paragraph 0023, lines 10-13)" (Answer 5).

PRINCIPLES OF LAW (1)

Anticipation is established when a single prior art reference discloses expressly or under the principles of inherency each and every limitation of the claimed invention. *Atlas Powder Co. v. IRECO Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1946 (Fed. Cir. 1999); *In re Paulsen*, 30 F.3d 1475, 1478-79, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994).

Obviousness is determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. *In re Hedges*, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984).

ANALYSIS (1)

Since each of the low-resolution cameras in Hunter lacks "a plurality of image sensing regions," and each of the high-resolution cameras is not associated with "a set of the plurality of image sensing regions," we agree with the Appellant's arguments concerning the lack of a prima facie case of anticipation for claims 1 and 3 (Br. 6 to 8).

Turning to the obviousness rejection of claims 2 and 4 to 6, we agree with the Appellant's contention (Br. 12) that the Examiner has not established a prima facie case of obviousness of these claims because the storage media teachings of Smith (paragraph 0023) fail to cure the noted shortcoming in the teachings of Hunter.

Turning next to the obviousness rejection of claims 7 to 9, we agree with the Appellant's contention that the Examiner has not established a prima facie case of obviousness of these claims because the teachings of

Westfield and Lee fail to cure the noted shortcoming in the teachings of Hunter (Br. 14 to 16).

Turning lastly to the other claims on appeal concerning fields of views of the cameras, we agree with Appellant's contentions that the applied references to Hunter, Westfield and Lee neither teach nor would have suggested to one of ordinary skill in the art "a low-resolution camera having a first field of view, and wherein each of the high-resolution cameras has a field of view that is a subset of the first field of view" (claim 11) or "the low-resolution camera has a field of view that is substantially the same as a combined field of view of the plurality of high-resolution cameras" (claim 20) (Br. 16 to 18).

ISSUE (2)

Does the applied prior art teach or suggest a low-resolution camera powering on a high-resolution camera based on detected motion in a sensed region?

FINDINGS OF FACT (2)

As indicated *supra*, the low-resolution camera 104 disclosed by Appellant controls the powering on of each of the high-resolution cameras 106A to 106O based on detected motion in sensed region.

As indicated *supra*, each of the cameras 10 in Hunter has a low-resolution mode as well as a high-resolution mode. The low-resolution side of each of the cameras 10 controls the powering on of the associated high-resolution side based on detected motion of an object (paragraph 0026). Hunter, like the disclosed and claimed invention, operates in the low-power

mode until motion is detected to minimize power consumption (Abstract; paragraph 0032).

PRINCIPLES OF LAW (2)

See Atlas Powder Co. v. IRECO Inc. supra.

During *ex parte* examination of an application, claims are given their broadest reasonable interpretation consistent with the specification. *In re Graves*, 69 F.3d 1147, 1152, 36 USPQ2d 1697, 1701 (Fed. Cir. 1995); *In re Etter*, 756 F.2d 852, 858, 225 USPQ 1, 5 (Fed. Cir. 1985). The claims on appeal are not confined to embodiments specifically described in the specification. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1323, 75 USPQ2d 1321, 1334 (Fed. Cir. 2005) (en banc).

ANALYSIS (2)

Appellant contends that Hunter does not teach "powering on" or "powering off" the high-resolution camera during switching between the two operating modes (Br. 9 to 11).

We disagree. As indicated *supra*, Hunter saves power by not operating the high-resolution side of each camera 10 until the low-resolution side detects motion. When motion is detected by a low-resolution camera 10, the associated high-resolution side of the camera is powered on. Nothing in the claims on appeal limits the claims to a single low-resolution camera as set forth in Appellant's specifically disclosed embodiment, and we will not confine the scope of the claims to that embodiment. Thus, we find that the Examiner has established a prima facie case of anticipation of claims 10, 13, 14, and 16 because Hunter teaches "powering on" and "powering off" of the high-resolution camera.

Turning to the obviousness rejection of claims 12, 15, and 17, the Examiner's prima facie case of obviousness has not been overcome because Appellant has not presented any patentability arguments for these claims apart from the arguments presented for claims 10 and 14 (Br. 13 and 14).

Turning next to the obviousness rejection of claims 18 and 19, the Examiner's prima facie case of obviousness has not been overcome because Appellant has not presented any patentability arguments for these claims apart from the arguments presented for claim 14 (Br. 17).

CONCLUSIONS

Anticipation has not been established by the Examiner for claims 1 and 3 because Hunter does not describe a low-resolution camera with "a plurality of image sensing regions." Anticipation has been established by the Examiner for claims 10, 13, 14, and 16 because Hunter describes a low-resolution camera "powering on" as well as "powering off" a high-resolution camera.

The obviousness of the claimed subject matter has not been established by the Examiner for claims 2, 4 to 9, 11, and 20 because the teachings of the secondary references to Smith, Westfield, and Lee fail to cure the noted shortcoming in the teachings of Hunter. On the other hand, obviousness of the claimed subject matter set forth in claims 12, 15, and 17 to 19 has been established by the Examiner.

DECISION

The anticipation rejection of claims 1, 3, 10, 13, 14, and 16 is affirmed as to claims 10, 13, 14, and 16, and is reversed as to claims 1 and 3.

The obviousness rejections of claims 2, 4 through 9, 11, 12, 15, and 17 through 20 are affirmed as to claims 12, 15, and 17 to 19, and are reversed as to claims 2, 4 to 9, 11, and 20.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED-IN-PART

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