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MCGLEW & TUTTLE, PC P.O. BOX 9227 SCARBOROUGH STATION SCARBOROUGH, NY 10510-9227			EOM, ROBERT J	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte KAL KÜCK, HANS-ULLRICH HANSMANN, DETLEF OTT,
ANDREAS MOHRMANN, and ARNE TRÖLLSCH

Appeal 2018-009088
Application 14/415,355
Technology Center 1700

Before CATHERINE Q. TIMM, JAMES C. HOUSEL, and
JEFFREY R. SNAY, *Administrative Patent Judges*.

TIMM, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the
Examiner’s decision to reject claims 1, 9–31, and 45–57. *See* Final Act. 1.
We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37
C.F.R. § 1.42. Appellant identifies the real party in interest as Dräger Safety
AG & Co. KGaA. Appeal Br. 1.

CLAIMED SUBJECT MATTER

The claims are directed to a gas measurement system that includes a digital camera. Claim 1, reproduced below with the claim limitation at issue highlighted, is illustrative of the claimed subject matter:

1. An apparatus comprising:

a housing defining a slot;

a reaction support unit;

a friction bearing within the slot configured to couple to the reaction support unit, the reaction support unit comprising at least two light permeable channels configured to receive at least one reaction substance, the at least one reaction substance changing color in presence of at least one particular gaseous or vaporous component;

a gas conveyance device configured to convey a gas mixture through at least one of the channels;

an optoelectronic detection device configured to detect a color change of the at least one reaction substance on the reaction support unit during and/or after the conveyance of the gas mixture, the color change being detected in the direction of flow of the gas mixture through the at least two channels in at least two separate positions;

a data reading device configured to read data stored on the reaction support unit, the data reading device comprising a digital camera;

an evaluating device configured to evaluate the data detected by the optoelectronic detection device; and

a sensory feedback device configured to provide sensory feedback characterizing the data evaluated by the evaluating device.

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Appeal Br. 52 (Claims Appendix) (emphasis added). Independent claims 48 and 53 also require that the optoelectronic detection device comprise a digital camera.

REFERENCES

The prior art relied upon by the Examiner is:

Name	Reference	Date
Sunshine	US 6,422,061 B1	July 23, 2002
Truex	US 2005/0196322 A1	Sept. 8, 2005
Fujitsuka	<i>Monolithic pyroelectric infrared image sensor using PVDF thin film</i> , Sensors and Actuators A 66 (1998) 237–243	1998

REJECTIONS

The Examiner maintains the following rejections:

- A. Claim 1, 9–11, 13–27, 31, and 45–57 rejected under 35 U.S.C. § 102(b) as being anticipated by Truex;
- B. Claim 12 rejected under 35 U.S.C. § 103(a) as being unpatentable over Truex in view of Fujitsuka; and
- C. Claims 28–30 rejected under 35 U.S.C. § 103(a) as being unpatentable over Truex in view of Sunshine.

OPINION

All of the claims require a digital camera. Claim 1 requires a data reading device comprising a digital camera. Claims 48 and 53 require an optoelectronic detection device comprising a digital camera.

The Examiner finds that the pyroelectric film of Truex is the required digital camera. Final Act. 3 (citing Truex ¶ 68). However, we agree with Appellant that Truex's pyroelectric film is not a digital camera. Appeal Br. 14.

The Examiner's error lies in an unreasonably broad interpretation of the term "digital camera." According to the Examiner, paragraph 58 of Appellant's Specification defines "digital camera" in such a way that it encompasses the pyroelectric film of Truex. The Examiner points to the language in paragraph 58 of the Specification (Ans. 15) stating that the digital camera can be designed as a camera chip. We reproduce the pertinent portion of paragraph 58 in context below:

Also, the digital camera 17 can be designed with an electronic image converter or image sensor and with an imaging optics system, preferably a lens system, and/or *the digital camera 17 can be designed as a camera chip*, particularly a CMOS camera chip, and/or the optoelectronic detection device can be formed by the digital camera 17.

Spec. ¶ 58 (emphasis added).

One must read this portion of paragraph 58 in the context of the disclosure as a whole, which describes digital camera 17 (shown in Figs. 1–3) as either the data reading device that reads optical coding 22 (e.g., matrix coding 29 as shown in Figure 5 or a barcode (Spec. ¶¶ 48, 50)) or the optoelectronic detection device that detects the color change in a reaction substance residing within channels 3 or both the data reading device and the optoelectronic device. Spec. ¶¶ 48, 50, 58. As such, the digital camera must have a camera chip that can record an optical image.

The meaning conveyed by the Specification accords with the ordinary and accustomed meaning of "digital camera." Dictionary.com defines a

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digital camera as (1) “a camera that records images in digital form by means of a device that converts the *optical image* to an electrical signal” or “a camera that *produces digital images* that can be stored in a computer, displayed on a screen and printed.” Dictionary.com/browse/digital-camera (accessed Jan. 22, 2020) (emphasis added).

Appellant’s digital camera can read data, such as a barcode, and can record the color of a reaction change as an image when used as an optoelectronic detection device. The pyroelectric film of Truex does not record an image, nor does it produce a digital image. It is not a camera or a camera chip. Truex’s film is a piezo film. Truex ¶ 66. It converts thermal energy into an electrical signal. Truex ¶ 68. Although this heat energy may be produced by a colorimetric change, it is still heat energy. Nor does the Examiner establish that the pyroelectric film records or stores an image.

The Examiner states that the pyroelectric film is an infrared camera chip that is analogous to a charge-coupled device (CCD) camera chip for infrared digital cameras. Ans. 15. But, to support an anticipation rejection, it is not enough for the pyroelectric film to be *analogous* to a CCD camera chip, it must *be* a camera chip. The pyroelectric film is a film, not a chip.

The Examiner’s reliance on further references to reject dependent claims does not remedy the error.

CONCLUSION

The Examiner's decision to reject claims 1, 9–31, and 45–57 is reversed.

DECISION SUMMARY

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1, 9–11, 13–27, 31, 45–57	102(b)	Truex		1, 9–11, 13–27, 31, 45–57
12	103(a)	Truex, Fujitsuka		12
28–30	103(a)	Truex, Sunshine		28–30
Overall Outcome				1, 9–31, 45–57

REVERSED