

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte M. IBRAHIM SEZAN

Appeal No. 2002-1460
Application 09/040,510

ON BRIEF

Before HAIRSTON, FLEMING, and GROSS, **Administrative Patent Judges**.

FLEMING, **Administrative Patent Judge**.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1, 4, 5, and 7 through 29. Claims 2, 3, and 6 have been canceled.

Invention

The invention relates to a system and method using an image recording device, i.e., a still or video camera, where the color histograms are computed on-line during image acquisition, and

where the computed histograms are stored in the image recording device. See page 1 of Appellant's specification. Histogram computations require a lot of processing time and present a computational bottleneck. See page 2 of Appellant's specification. Figure 3 is a block diagram of an image acquisition device constructed according to the invention. See page 3 of Appellant's specification. As shown in figure 3, camera 14 includes an image sensor 16, which generates an analog image signal. The analog image signal, A, representative of a sensed image I, is sent to an analog-to-digital converter 18, which converts analog image A into a digital image signal D. The digital image signal D is sent in parallel to both the histogram computation 28 and the end camera image processing 20. The computed histograms are stored in histogram storage mechanism 30 of storage mechanism 22. See page 5 of Appellant's specification. The processed image signal from end camera image processing 20 is stored in image storage 24 of storage mechanism 22. Information in a table links histograms with their associated images and also are recorded. See page 6 of Appellant's specification.

Appellant's independent claim 1 is representative of the claimed invention and is hereby reproduced as follows:

1. An image acquisition system, comprising:

an image sensor for sensing an image and generating an image signal therefor;

a histogram computation mechanism for generating, on-line, a computed histogram from said image signal;

a storage mechanism for persistently storing said image signal and said computed histogram; and

a linking mechanism for linking said image signal and said computed histogram associated therewith.

References

The references relied on by the Examiner are as follows:

Alkofer	4,677,465	Jun. 30, 1987
Zhang et al. (Zhang)	5,635,982	Jun. 3, 1997
Daly	5,150,433	Sep. 22, 1992

Rejections at Issue

Claims 1, 4, 5, 8, 9, 11, 13 through 15, 17, 18, 20, 22, and 23 stand rejected under 35 U.S.C. § 102 as being anticipated by Alkofer. Claims 7, 12, 16, 21, 24 and 25 stand rejected under 35 U.S.C. § 103 as being unpatentable over Alkofer in view of Zhang. Claims 10 and 19 stand rejected under 35 U.S.C. § 103 as being unpatentable over Alkofer in view of Daly. Claims 26 through 29 stand rejected under 35 U.S.C. § 103 as being

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unpatentable over Alkofer.

Throughout the opinion, we will make reference to the briefs¹ and the answer for the respective details thereof.

OPINION

With full consideration being given to the subject matter on appeal, the Examiner's rejections and the arguments of the Appellant and the Examiner, for the reasons stated *infra*, we reverse the Examiner's rejection of claims 1, 4, 5, 8, 9, 11, 13 through 15, 17, 18, 20, 22, and 23 under 35 U.S.C. § 102 and we reverse the Examiner's rejection of claims 7, 10, 12, 16, 19, 21, and 24 through 29 under 35 U.S.C. § 103.

Rejection under 35 U.S.C. § 102

It is axiomatic that anticipation of a claim under § 102 can be found only if the prior art reference discloses every element of the claim. **See In re King**, 801 F.2d 1324, 1326, 231 USPQ 136,

¹ Appellant filed an appeal brief on March 21, 2001. Examiner mailed a notice of defective brief on May 22, 2001. Appellant filed a substitute appeal brief on June 20, 2001. The substitute brief corrected the defects, noted by the Examiner. We will simply refer to the substitute appeal brief as the brief in the opinion. Appellant filed a reply brief on November 13, 2001. The Examiner mailed out an office communication on January 29, 2002 stating that the reply brief has been entered.

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138 (Fed. Cir. 1986) and **Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.**, 730 F.2d 1452, 1458, 221 USPQ 481, 485 (Fed. Cir. 1984).

Appellant argues that Alkofer fails to teach a storage mechanism for persistently storing said image signal and said computed histogram, and a linking mechanism for linking said image signal and said computed histogram associated therewith as recited in Appellant's claim 1. See pages 4 through 6 of the brief and the reply brief. Appellant further argues that Alkofer fails to teach an image storage mechanism for persistently storing said processing image signal, a histogram computation mechanism for generating, on-line, a computed histogram from said image signal, a histogram storage mechanism for persistently storing said computed histograms, and a linking mechanism for linking said processed image signal and said computed histogram associated therewith as recited in Appellant's claim 14. See pages 7 and 8 of the brief and the reply brief. Appellant also argues that Alkofer fails to teach forming a link for linking the computed histogram with an associated image signal and storing, persistently, the image signal, the computed histogram and the link as recited in Appellant's claim 22. See page 9 of the brief

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and the reply brief.

The Examiner argues that Alkofer does teach persistently storing the image signal and computed histogram. The Examiner points us to figure 6, memory 34, and histogram memory 54. See pages 3, 4, 5, 6, 7, 8, and 12 through 16 of the Examiner's answer.

Turning to Alkofer, we find that Alkofer is a method of processing a digital color image derived from photographic film. See column 1, lines 8 through 10. We further find that Alkofer states that figure 6 is a schematic diagram showing scan printing apparatus. See column 3, lines 61 and 62. Alkofer teaches the details of figure 6 in column 4, line 24, through column 5, line 68. There, Alkofer teaches that the input device includes a light source 20 and lens 22 for projecting an image of a color negative film 24 onto three solid state image sensing arrays 26. The image sensor 26 scans the color photographic negatives to produce three color separation signals R, G and B. The signals thus produced are supplied to analog-to-digital converters 32. The digital color image signals produced from the analog-to-

digital converters are stored in a digital image storage memory 34. A digital computer 36 then reads from the image storage memory 34 the digital image signals and then processes these signals to be supplied to digital-to-analog converters 66 which then supply the analog signals to the output scanning device 68 to reproduce the process color image on a light sensitive media such as a color photographic paper. Thus, Alkofer's scanner simply scans a color negative, processes the scanned signal and then supplies the processed scanned signal to be exposed on a light sensitive color photographic paper. The entire process does not teach or suggest storing any of the intermediate process signals to be recalled after the light sensitive paper has been exposed. Therefore, we fail to find that Alkofer teaches the above claimed limitations.

Rejections under 35 U.S.C. § 103

In rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of establishing a **prima facie** case of obviousness. **In re Oetiker**, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). **See also In re Piasecki**, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). The Examiner can satisfy this burden by showing that some objective teaching in

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the prior art or knowledge generally available to one of ordinary skill in the art suggests the claimed subject matter. **In re Fine**, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

Only if this initial burden is met does the burden of coming forward with evidence or argument shift to the Appellant. **Oetiker**, 977 F.2d at 1445, 24 USPQ2d at 1444. **See also Piasecki**, 745 F.2d at 1472, 223 USPQ at 788.

An obviousness analysis commences with a review and consideration of all the pertinent evidence and arguments. "In reviewing the [E]xaminer's decision on appeal, the Board must necessarily weigh all of the evidence and argument." **Oetiker**, 977 F.2d at 1445, 24 USPQ2d at 1444. "[T]he Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion." **In re Lee**, 277 F.3d 1338, 1344, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002).

For the rejections under 35 U.S.C. § 103, we note that the Examiner relies on Alkofer for the above limitations.

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Furthermore, we note that Zhang and Daly fail to teach these limitations. Thus, we will not sustain the Examiner's rejection under 35 U.S.C. § 103 for the reasons set forth above.

In view of the foregoing, we have not sustained the Examiner's rejection of claims 1, 4, 5, 8, 9, 11, 13 through 15, 17, 18, 20, 22, and 23 under 35 U.S.C. § 102. Furthermore, we have not sustained the Examiner's rejection of claims 7, 10, 12, 16, 19, 21, and 24 through 29 under 35 U.S.C. § 103.

REVERSED

KENNETH W. HAIRSTON)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
MICHAEL R. FLEMING)	
Administrative Patent Judge)	APPEALS AND

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