

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MARINA MARIE PIERRE NICOLAS
and MICHEL WOUTER NIEUWENHUIZEN

Appeal 2007-2922
Application 09/958,330¹
Technology Center 2600

Decided: April 3, 2008

Before ROBERT E. NAPPI, JOHN A. JEFFERY, and MARC S. HOFF,
Administrative Patent Judges.

HOFF, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF CASE

Appellants appeal under 35 U.S.C. § 134 from a Final Rejection of claims 1-7. In the Examiner's Answer, the Examiner withdraws the rejection of claim 2; therefore, the rejection of claims 1 and 3-7 is before us. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ Application filed October 9, 2001. The real party in interest is U.S. Philips Corporation.

Appellants' invention relates to a device and method for picture signal enhancement. A picture signal is subjected to a histogram-based picture signal modification based on a luminance level distribution over a whole picture or a first part of the picture. The histogram-based picture signal modification is locally adjusted in dependence on locally measured picture signal properties other than contrast and brightness, those properties relating to second parts of the picture that are each substantially smaller than the whole picture or the first part of the picture, the second parts being within the whole picture or the first part of the picture (Specification 2).

Claim 1 is exemplary:

1. A method of picture signal enhancement, the method comprising the steps of:

subjecting a picture signal to a histogram-based picture signal modification based on a luminance level distribution over a whole picture or a first part of the picture; and

locally adjusting the histogram-based picture signal modification in dependence on locally measured picture signal properties other than contrast and brightness, the locally measured picture signal properties relating to second parts of the picture that are each substantially smaller than the whole picture or the first part of the picture, the second parts being within the whole picture or the first part of the picture.

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

Jaspers US 6,741,736 B1 May 25, 2004

Claims 1 and 3-7 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Jaspers.

Appellants contend that Jaspers does not teach subjecting a picture signal “in its entirety” (Br. 6) to a histogram-based picture signal

modification, and that “locally adjusting the histogram-based picture signal modification” in Jaspers does not apply to a picture signal “in its entirety.” The Examiner argues that Jaspers’ modification of a luminance signal meets the claim requirement to modify “a picture signal” (Ans. 5).

Rather than repeat the arguments of Appellants or the Examiner, we make reference to the Brief and the Answer for their respective details.

ISSUE

The principal issue in the appeal before us is whether the histogram-based modification of a luminance signal based on a luminance level distribution taught by Jaspers meets claim 1, which requires such modification of “a picture signal.”

FINDINGS OF FACT

The following Findings of Fact (FF) are shown by a preponderance of the evidence.

The Invention

1. According to Appellants, they have invented a device and method for picture signal enhancement. A picture signal is subjected to a histogram-based picture signal modification based on a luminance level distribution over a whole picture or a first part of the picture. The histogram-based picture signal modification is locally adjusted in dependence on locally measured picture signal properties other than contrast and brightness, those properties relating to second parts of the picture that are each substantially smaller than the whole picture or the first part of the picture, the second parts being within the whole picture or the first part of the picture (Spec. 2).

2. Appellants' Specification does not contain a special definition of the term "picture signal."

Jaspers

3. Jaspers teaches histogram equalization of an image signal (Abstract).

4. A luminance signal Y is applied to a histogram calculation circuit HC to obtain its histogram (col. 5, ll. 10-11).

5. The luminance signal is histogram-dependently processed in a histogram-dependent processor HP to obtain a modified signal Ymod in dependence upon the calculated histogram (col. 5, ll. 11-14).

6. The modified signal Ymod is then enhanced in an enhancement circuit E to obtain an output signal Yo based on a color saturation signal RGBsat that is obtained by a saturation calculation circuit SAT from the color signals RGB (col. 5, ll. 15-18).

7. Jaspers teaches measuring of each pixel the saturation level in the YUV color space in which the histogram converter is acting (col. 2, ll. 20-22).

PRINCIPLES OF LAW

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 (Fed. Cir. 1999); *In re Paulsen*, 30 F.3d 1475, 1478-79 (Fed. Cir. 1994).

Our reviewing court states that "claims must be interpreted as broadly as their terms reasonably allow." *In re Zletz*, 893 F.2d 319, 321 (Fed. Cir.

1989). Our reviewing court further states that “the words of a claim ‘are generally given their ordinary and customary meaning.’” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (internal citations omitted). The “ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Id.* at 1313. The description in the specification can limit the apparent breadth of a claim in two instances: (1) where the specification reveals a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess; and (2), where the specification reveals an intentional disclaimer, or disavowal, of claim scope by the inventor. *Id.* at 1316.

ANALYSIS

Claims 1 and 3-7

We select claim 1 as representative of this group, pursuant to our authority under 37 C.F.R. § 41.37(c)(1)(vii).

Appellants admit that “Jaspers shows the luminance portion Y of a picture signal Y, R, G, B, being applied to a histogram calculation circuit HC to obtain a histogram, and the histogram is used in histogram-dependent processor HP process [sic] the luminance portion Y of the picture signal to form a modified luminance signal Y_{mod}” (Br. 6). Appellants nevertheless argue that “Jaspers subjects a luminance portion of a picture signal (not the picture signal itself) to a histogram-based picture signal modification based on a luminance level distribution over a whole picture or a first part of the picture” (*id.*). In response, the Examiner posits that Jasper’s luminance

signal is “a picture signal” (Ans. 5), thus meeting the plain language of the claim.

We agree with the Examiner. Jaspers, assigned to the parent company of the real party in interest, refers to its luminance signal Y as “an image signal” (Abstract). We therefore find the luminance signal of Jaspers to constitute a picture signal. We have reviewed Appellants’ Specification and find no special definition of the claim term “picture signal” requiring us to construe the term to include the luminance (Y) *and* chrominance (U, V) signals (FF 2), Appellants’ argument notwithstanding. We agree with the Examiner that, as admitted by Appellants, Jaspers teaches subjecting a picture signal to a histogram-based picture signal modification based on a luminance level distribution (Fig. 4; FF 4, 5, 6).

Appellants further argue that although Jaspers teaches measuring, “of each pixel the saturation level in the YUV color space in which the histogram converter is acting” (Br. 7, quoting Jaspers col. 2, ll. 20-22; FF 7), Jaspers does not teach “locally adjusting the histogram-based picture signal modification” because, as noted *supra*, Jaspers teaches modifying a luminance signal Y, rather than the picture signal “in its entirety” (Br. 6). Because we find *supra* the luminance signal of Jaspers to be a picture signal, we agree with the Examiner that Jaspers teaches “locally adjusting the histogram-based picture signal modification in dependence on locally measured picture signal properties” (in this case, saturation), as required by claim 1.

We therefore find that Jaspers teaches all the elements of independent claim 1, and we do not find error in the Examiner's rejection of claim 1, or claims 3-7 dependent therefrom, under 35 U.S.C. § 102(e).

CONCLUSION OF LAW

We conclude that Appellants have not shown that the Examiner erred in rejecting claims 1 and 3-7. Claims 1 and 3-7 are not patentable.

DECISION

The Examiner's rejection of claims 1 and 3-7 is affirmed.

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).

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AFFIRMED

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR NY 10510