

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. 25

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CECILE JOUBERT, BRIGITTE LOISEAUX,
JEAN-PIERRE HUIGNARD, and ANNE DELBOULBE

Appeal No. 2000-1201
Application No. 08/817,825

HEARD: Jan. 17, 2002

Before KRASS, BARRETT, and BARRY, *Administrative Patent Judges*.
BARRY, *Administrative Patent Judge*.

DECISION ON APPEAL

The examiner rejected the claims 3 and 10-12. The appellants appeal therefrom under 35 U.S.C. § 134(a). We reverse.

BACKGROUND

The invention at issue in this appeal is an illumination system for an electrooptic color display screen. A holographic separator receives a white light beam from a light source; separates the white light into red, green, and blue

light beams; and transmits the latter beams in different directions. A liquid crystal display ("LCD") screen features a plurality of pixels. Each pixel comprises a red sub-pixel, a blue sub-pixel, and a green sub-pixel. A chromatic modulator, positioned between the light source and the LCD screen, is tuned to a predetermined wavelength so as to transmit a predetermined portion of light energy that it receives at the predetermined wavelength to the LCD screen.

Claim 10, which is representative for present purposes, follows:

10. An illumination system for an electrooptic colour display screen, comprising:

a polychrome light source;

a spatio-chromatic separation system receiving a polychrome light beam coming from said polychrome light source and transmitting a plurality of illuminating light beams having different wavelength ranges and in different directions;

an electrooptic display screen having a plurality of image elements, each one of said plurality of image elements having a plurality of display elements; and

at least one chromatic modulation device provided between said polychrome light source and said display screen, said at least one chromatic

modulation device being tuned to a predetermined wavelength and transmitting a predetermined portion of light energy which it receives at said predetermined wavelength to said display screen,

wherein

each one of said plurality of image elements has a number of said plurality of display elements equal to a number of said plurality of illuminating light beams, and wherein said spatio-chromatic separation system is a holographic device receiving a beam containing a plurality of primary beams and transmitting each one of said plurality of primary beams in a respective different direction.

(Appeal Br., App. I)

The prior art applied by the examiner in rejecting the claims follows:

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| Loiseaux et al. ("Loiseaux") 14, 1995 | 5,467,206 | Nov. |
| | (filed July 6, 1994) | |
| Ichikawa 1996 | 5,506,701 | Apr. 9, |
| | (filed Jan. 28, 1994). | |

Claims 3 and 10-12 stand rejected under 35 U.S.C. § 103(a) as obvious over Loiseaux in view of Ichikawa.

OPINION

After considering the record, we are persuaded that the examiner erred in rejecting claims 3 and 10-12. Accordingly, we reverse.

Rather than reiterate the positions of the examiner or appellants *in toto*, we address the main point of contention therebetween. The examiner makes the following allegations.

[The] absorption or reflective color filters tuned to a predetermined wavelength would have been obvious in view of those teachings of Loiseaux et al. In fact, one skilled in the art would have readily recognized a neutral density filter or a color filter tuned to the central wavelength of the color would provide desired attenuation or modulation but a tuned color filter would be preferable to further purify the illuminating light to the desired pixels to thereby provide highly saturated pixel colors. Such color filters are well known both as absorption filters and as interference reflective filters and therefore both types would have been obvious as chromatic modulation devices as set out in claim 10. Such filters, whether absorption filters or reflective filters, clearly would provide aspects (1) and (2) above when introduced into the Fig. 9 arrangement of Loiseaux et al. Additionally, claim 10 would read on such obvious devices, whether or not more than one color was attenuated because claim 10 merely requires tuning and transmission of a predetermined wavelength, not *only* a predetermined wavelength, although it would have been obvious to filter only one color because such would provide substantial chromatic correction more easily and with the least total loss of intensity.

(Examiner's Answer at 4-5.) The appellants argue, "the *Loiseaux et al* spatial filter has no teaching or fair suggestion of the claimed tuning to a predetermined wavelength relative to the suggested use of an attenuator." (Reply Br. at 2.)

In deciding obviousness, "[a]nalysis begins with a key legal question -- *what is the invention claimed?*" *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1567, 1 USPQ2d 1593, 1597 (Fed. Cir. 1987). Here, claim 10 specifies in pertinent part the following limitations: "at least one chromatic modulation device being tuned to a predetermined wavelength and transmitting a predetermined portion of light energy which it receives at said predetermined wavelength to said display screen. . . ." Accordingly, the claim requires *inter alia* a chromatic modulator tuned to a wavelength and transmitting a portion of light that it receives at the wavelength.

Having determined what subject matter is being claimed, the next inquiry is whether the subject matter is obvious. “[T]o establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant.” *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1316 (Fed. Cir. 2000)(citing *In re Dance*, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998); *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984)). “[E]vidence of a suggestion, teaching, or motivation to combine may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved. . . .” *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999)(citing *Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc.*, 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1630 (Fed. Cir. 1996); *Para-Ordinance Mfg. v. SGS Imports Intern., Inc.*, 73 F.3d 1085, 1088, 37 USPQ2d 1237, 1240 (Fed. Cir. 1995)). “The range of sources available, however, does not diminish the

requirement for actual evidence. That is, the showing must be clear and particular. See, e.g., *C.R. Bard*, 157 F.3d at 1352, 48 USPQ2d at 1232. Broad conclusory statements regarding the teaching of multiple references, standing alone, are not 'evidence.'" *Id.* at 999, 50 USPQ2d at 1617 (citing *McElmurry v. Arkansas Power & Light Co.*, 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993); *In re Sichert*, 566 F.2d 1154, 1164, 196 USPQ 209, 217 (CCPA 1977)).

Here, we agree with the appellants that Loiseaux's "filter F1 is not 'tuned to a predetermined wavelength' as required by Claim 10." (Appeal Br. at 6.) For his part, the examiner admits that the "[f]ilter F1 [sic] of Loiseaux et al does not transmit a predetermined portion of light energy which it receives at the predetermined wavelength to which it is tuned as set out in claim 10. . . ." (Examiner's Answer at 4.)

Furthermore, the examiner fails to show clear and particular evidence of the desirability of substituting a

tuned color filter for the reference's filter. His broad, conclusory statement of "further purify[ing] the illuminating light to the desired pixels to thereby provide highly saturated pixel colors," standing alone, is not evidence.

Relying on Loiseaux merely to teach that holography "is a common way to form . . . diffractive structures," (Final Rejection at 3), the examiner fails to allege, let alone show, that the secondary reference cures the defect of the primary reference. Absent evidence that the Loiseaux's display device would benefit from a tuned color filter, we are not persuaded of that teachings from the prior art would have suggested combining the substitution. Therefore, we reverse the rejection of claims 3 and 10-12 as obvious over Loiseaux in view of Loiseaux.

CONCLUSION

In summary, the rejection of claims 3 and 10-12 under § 103(a) is reversed.

REVERSED

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| ERROL A. KRASS |) | |
| Administrative Patent Judge |) | |
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| Administrative Patent Judge |) | AND |
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