

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte SATOSHI ARAKAWA

Appeal 2007-0996
Application 09/949,721
Technology Center 2600

Decided: October 9, 2007

Before KENNETH W. HAIRSTON, LANCE LEONARD BARRY, and
JOHN A. JEFFERY, *Administrative Patent Judges*.

BARRY, *Administrative Patent Judge*.

DECISION ON APPEAL

I. STATEMENT OF THE CASE

A Patent Examiner rejected claims 1-19. The Appellant appeals therefrom under 35 U.S.C. § 134(a). We have jurisdiction under 35 U.S.C. § 6(b).

A. INVENTION

The invention at issue on appeal displays images. X-ray apparatuses, computed radiography ("CR") apparatuses, computed tomography ("CT") apparatuses, and magnetic resonance imaging ("MRI") apparatuses are used in medical fields. (Specification 1.) In many cases, a limiter narrows a radiation field so that only necessary parts of a subject are exposed thereto. (*Id.* 4.) When the limiter is used, an image of the subject is recorded in a "radiation field area" of a recording medium such as an X-ray film or a phosphor sheet. The radiation field area refers to an area of the recording medium within the outline of an opening in the limiter. Conversely, radiation does not reach the area of the recording medium outside the outline; this "extra-radiation field area" remains unexposed. (*Id.* 5.) If X-ray films are placed on a viewer, or if images are electrically displayed on a screen, however, the extra-radiation field area allows unnecessary light to enter into the eyes of an observer, which hinders observation of the images. (*Id.* 7.)

In contrast, the Appellant's invention includes a flat display and a backlight. Based on data concerning the image to be displayed, a controller turns off the part of the backlight corresponding to a non-image area. (*Id.* 8.)

B. ILLUSTRATIVE CLAIM

Claim 1, which further illustrates the invention, follows:

1. An image display apparatus comprising:
 - a flat-shaped transmission display device for displaying on a display screen thereof an image based on image signal data supplied from an image data supplying source;

a backlight corresponding to said display screen of said display device; and

a control unit for automatically controlling said backlight based on an information signal data concerning said image to be displayed in such a way that a part of said backlight corresponding to a non-image area on said display screen is turned off,

wherein said information signal data concerning said image is supplied from an image data supplying source together with said image signal data used for displaying said image on said display screen of said display device, and

wherein said image displayed on said display screen of said display device is a target image for a medical diagnostic use.

C. REJECTIONS

Claims 1, 6, and 8-18 stand rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No 6,269,565 ("Inbar"). Claims 2-4 stand rejected under 35 U.S.C. § 103(a) as obvious over Inbar and U.S. Patent No. 6,496,236 ("Cole"). Claims 5 and 19 stand rejected under § 103(a) as obvious over Inbar and the Appellant's admitted prior art ("AAPA"). Claim 7 stands rejected under § 103(a) as obvious over Inbar and U.S. Patent No. 6,292,157 ("Greene").

II. ISSUE

"Rather than reiterate the positions of parties *in toto*, we focus on the issue therebetween." *Ex parte Filatov*, No. 2006-1160, 2007 WL 1317144, at *2 (BPAI 2007). The Examiner finds, "Inbar discloses in Fig. 2, in image display apparatus comprising: a flat shape transmission device (LCA 20 and

22) for displaying image on a display screen 14 based on the image signal data supplying an image supplying source 24 (col. 16, lines 64 - col. 17 line 7)." (Answer 4.) The Appellant argues "that the enhancement film 24 includes no image information itself and cannot provide an image data supplying source." (Reply Br. 2.) Therefore, the issue is whether Inbar alone teaches, or whether Inbar, Cole, AAPA, or Greene collectively would have suggested, a data source for supplying image signal data to a flat-shaped transmission display device.

"Both anticipation under § 102 and obviousness under § 103 are two-step inquiries. The first step in both analyses is a proper construction of the claims. . . . The second step in the analyses requires a comparison of the properly construed claim to the prior art." *Medichem, S.A. v. Rolabo, S.L.*, 353 F.3d 928, 933, 69 USPQ2d 1283, 1286 (Fed.Cir. 2003) (internal citations omitted).

III. CLAIM CONSTRUCTION

Claims 1 and 19 recite in pertinent part the following limitations: "a flat-shaped transmission display device for displaying on a display screen thereof an image based on image signal data supplied from an image data supplying source. . . ." Considering the limitations, the independent claims require a data source for supplying image signal data to a flat-shaped transmission display device.

IV. ANTICIPATION ANALYSIS

"[A]nticipation of a claim under § 102 can be found only if the prior art reference discloses every element of the claim. . . ." *In re King*, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986) (citing *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1458, 221 USPQ 481, 485 (Fed. Cir. 1984)). "[A]bsence from the reference of any claimed element negates anticipation." *Kloster Speedsteel AB v. Crucible, Inc.*, 793 F.2d 1565, 1571, 230 USPQ 81, 84 (Fed. Cir. 1986).

Here, Figures 1 and 2 of Inbar respectively "show a perspective partial cut-away illustration and a cross-sectional view of a transparency viewer 10. . . ." (Col. 16, ll. 53-55.) "[T]ransparencies (films) 16 are held on [a] faceplate 14" (*id.* ll. 58-59) of the viewer. "Liquid Crystal Arrays (LCAs) 20 and 22 is [sic] located interior to faceplate 14." (*Id.* ll. 64-66.) "A Brightness Enhancement Film (BEF) 24. . . is optionally located behind the LCAs." (Col. 17, ll. 8-10.)

As aforementioned, the Examiner reads the claims' "image data supplying source" on the reference's BEF. Inbar discloses the operation of the BEF as follows.

BEF 24 preferentially accepts light from off-normal directions and redirects them in a narrow cone around the normal. Light from the normal direction is mostly reflected back. It should be appreciated that this process of preferring off-axis light and reflecting back a significant proportion of normally-incident

light creates a fair amount of mixing, particularly chromatic mixing.

(*Id.* ll. 18-24.) For our part, we are unpersuaded that redirecting and reflecting light from various directions constitutes supplying image signal data. The absence of a data source for supplying image signal data to a flat-shaped transmission display device negates anticipation.

V. OBVIOUSNESS ANALYSIS

"In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a *prima facie* case of obviousness." *In re Rijckaert*, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993) (citing *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992)). "A *prima facie* case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art." *In re Bell*, 991 F.2d 781, 783, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) (quoting *In re Rinehart*, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976)).

Here, the Examiner does not allege, let alone show, that the addition of Cole, AAPA, or Greene cures the aforementioned deficiency of Inbar. Absent a teaching or suggestion of a data source for supplying image signal data to a flat-shaped transmission display device, we are unpersuaded of a *prima facie* case of obviousness.

VI. ORDER

For the aforementioned reasons, we reverse the rejections of claim 1; of claims 2-18, which depend therefrom; and of claim 19.

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REVERSED

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