

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

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* ELIZABETH A. MARSHALL, DARYL E. SCHILKE, and  
ULRICH RANKERS

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Appeal 2006-2020  
Application 10/267,152  
Technology Center 3700

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Decided: March 7, 2007

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Before TERRY J. OWENS, JENNIFER D. BAHR, and LINDA E.  
HORNER, *Administrative Patent Judges*.

BAHR, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Elizabeth A. Marshall et al. (Appellants) appeal under 35 U.S.C. § 134 from the Examiner's decision rejecting claims 1-10 and 12-15. We have jurisdiction over this appeal under 35 U.S.C. § 6.

We AFFIRM.

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Appellants' invention is the provision of one or more handles on the display of a cart-supported ultrasonic diagnostic imaging system to facilitate repositioning of the display for ease and comfort of viewing (Specification 1). Claim 1 is illustrative of the invention and reads as follows:

1. An ultrasonic diagnostic imaging system comprising:
  - a cart in which electronic components of the system are located;
  - a control panel connected to the cart;
  - a display articulating mechanism mounted on the cart;
  - an image display mounted on the articulating mechanism; and
  - a handle located on the image display, wherein the position of the image display relative to the cart is changed by changing the position of the articulating mechanism by manually applying a force to the image display handle.

The Examiner relies upon the following as evidence of unpatentability:

Burris	US 5,924,988	Jul. 20, 1999
Rosen	US 5,941,488	Aug. 24, 1999
Yeh	US 6,543,734 B2	Apr. 08, 2003
Henderson	US 6,595,922 B1	Jul. 22, 2003
Crain	US 6,644,852 B2	Nov. 11, 2003

Appellants seek review of the Examiner's rejections under 35 U.S.C. § 103(a) of claims 1-7, 14, and 15 as unpatentable over Burris in view of

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Rosen, Crain, or Yeh, claim 8 as unpatentable over Burris in view of Rosen, Crain, or Yeh, further in view of Henderson, and claims 9, 10, 12, and 13 as unpatentable over Burris in view of Rosen or in view of Crain or Yeh, further in view of Rosen.

The Examiner provides reasons in support of the rejections in the Answer (mailed October 5, 2005). Appellants present opposing arguments in the Brief (filed May 13, 2005).

#### ISSUE

The basic issue in this case is whether it would have been obvious, in view of any of Rosen, Crain or Yeh, to provide one or more handles on the display device of Burris' cart-supported diagnostic medical imaging ultrasound system to assist the operator in positioning the display device.

#### FINDINGS OF FACT

1. Appellants do not allege that Burris lacks any of the limitations recited in claim 1, with the exception of the handle located on the image display.
2. Burris discloses a medical imaging ultrasound system comprising an image generator 200 housed in a cart 710 and a display device 730 supported on the cart via swiveling arms 740, 750. The operator can horizontally position display device 730 outside the cart using arms 740, 750. Swiveling arm 750 connects to display device 730 with a

swiveling hinge 760. The operator can swivel and tilt display device 730 to a desired position using the swiveling hinge 760 (col. 6, ll. 24-31).

3. Burris' display device arrangement provides great flexibility in positioning the display device relative to the cart. The ability of the operator to position the display device away from the cart and closer to the patient, moving the display device into the operator's line of sight during the examination, increases operator efficiency and improves system ergonomics by reducing operator fatigue and body strain (col. 7, ll. 14-22).
4. Rosen discloses a pair of handles positioned on the housing of a display monitor to facilitate reorientation of the monitor about a pivot axis, for optimum viewing by passengers in a vehicle, as well as sliding and turning movement of the monitor and monitor support member between stowed and deployed positions (col. 5, ll. 40-44).
5. Crain discloses a control handle 120 positioned on the supporting frame 106 of the display 116 of an x-ray detector (col. 5, ll. 6-10).
6. Yeh discloses a handle member 11 disposed at the edge 16 of a display screen 10. The display screen is supported on a stand member 15 by a supporting member 13. The handle member assists users in pivoting the supporting member 13 to an appropriate angle relative to the stand member 15 (col. 2, ll. 28-36, 48-50, 63-67).

7. The Examiner relies on Henderson simply to illustrate that the term “bezel” is used in the field of medical diagnostic ultrasound imaging systems to denote the portion of the display housing that borders the display screen (col. 6, l. 16; Fig. 11).

#### PRINCIPLES OF LAW

To establish obviousness based on a combination of 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 Appellants. The motivation, suggestion or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, in some cases, the nature of the problem to be solved. In addition, the teaching, motivation or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references. The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art. *See In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1316-17 (Fed. Cir. 2000).

When the improvement is technology-independent and the combination of references results in a product or process that is more desirable, an implicit motivation to combine exists even absent any hint of suggestion in the references themselves. “In such situations, the proper question is whether the ordinary artisan possesses knowledge and skills

rendering him *capable* of combining the prior art references.” *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1368, 80 USPQ2d 1641, 1651 (Fed. Cir. 2006).

## ANALYSIS

Burris clearly recognizes that permitting the operator of a diagnostic medical imaging ultrasound system to adjust the position and orientation of the display device thereof relative to the cart is desirable ergonomically and provides swiveling arms and a swiveling hinge to facilitate such adjustment (Findings of Fact 2, 3). As evidenced by Rosen in particular, as well as Crain and Yeh, providing handles on the housings of display monitors to facilitate manipulation of the monitor to adjust its position or orientation for optimal viewing was well known in the art at the time of Appellants’ invention. The benefit of providing a handle to facilitate grasping the monitor for repositioning or reorientation is truly technology-independent and would have been readily recognized by one of ordinary skill in the art as equally applicable to adjustably-mounted display devices of medical diagnostic imaging ultrasound systems. Moreover, one of ordinary skill in the art would have immediately understood how to apply a handle, or a pair of handles as taught by Rosen, to the display device of Burris to assist the operator in grasping the display device for repositioning or reorientation. Accordingly, we conclude that implicit motivation exists to combine the applied references, Burris and Rosen in particular, by providing a pair of

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handles on the housing of Burris' display device to facilitate grasping of the display device by the operator to reposition or reorient the display device. We therefore sustain the rejection of claim 1, and the rejections of claims 2-9, 12, 14, and 15, which Appellants have not argued with any reasonable specificity apart from claim 1.

Claims 10 and 13 recite that the first and second handles comprise knobs. In rejecting these claims as unpatentable over Burris in view of Rosen or in view of Crain or Yeh, further in view of Rosen, the Examiner states that the use of a knob to articulate a flat panel or position a display as an alternative to a U-shaped handle is notoriously well-known (Answer 8) and contends that it therefore would have been obvious to use a knob for a handle on Burris' display device (Answer 6).

In this case, Appellants have not challenged the Examiner's statement that the use of a knob to articulate a flat panel or position a display as an alternative to a U-shaped handle is notoriously well-known. Further, Appellants have not challenged the Examiner's determination that it would have been obvious, in view of the known use of a knob in place of a handle to articulate a flat panel or position a display, to use a knob for a handle on Burris' display device. Rather, Appellants merely point out that Rosen does not disclose knobs (Br. 10).

In light of the above, we conclude that Appellants have not demonstrated error in the Examiner's rejection of claims 10 and 13. We therefore sustain the rejection of claims 10 and 13.

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## SUMMARY

The decision of the Examiner to reject claims 1-10 and 12-15 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). *See* 37 C.F.R. § 1.136(a)(1)(iv).

**AFFIRMED**

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