

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

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. 12

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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**Ex parte** MICHAEL J. DAILY, MICHAEL D. HOWARD,  
KEVIN R. MARTIN and ROBERT L. SELIGER

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Appeal No. 1998-0621  
Application No. 08/323,288

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ON BRIEF

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Before THOMAS, HAIRSTON, and HECKER, **Administrative Patent Judges**.

HECKER, **Administrative Patent Judge**.

**DECISION ON APPEAL**

This is a decision on appeal from the final rejection of claims 1 through 10, all claims pending in this application.

The invention relates to a computerized information display system. The display allows a user to view multiple full-size data windows in a non-overlapping manner, several of

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which may be viewed with peripheral vision. The display device is mounted on the user's head, and displays the data windows separately to each eye of the user to create a binocular, stereoscopic virtual screen image that has a virtual screen size independent of the physical size of the display screen. A head tracking position sensor, also mounted on the user's head, inputs a position control signal to the computer to selectively change the selected viewing location of the data windows based upon movement of the user's head.

Representative independent claim 1 is reproduced as follows:

1. A computerized data display system comprising:
  - a computer operating in accord with a window display management system for the display and control of a plurality of data windows on at least one display screen of at least one display device, said plurality of data windows being displayed in a non-overlapping manner on said at least one display screen in a spatial relation corresponding to a field of view seen from a preselected viewing location selected by means of a position control signal provided as an input to said computer;
  - a head coupled image display device, coupled to said at least one display screen of said at least one display device, for displaying said plurality of data windows appearing on said at least one display screen of said at least one

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display device separately to each eye of a user to create a binocular virtual screen image to the user that has a virtual screen size independent of the size of said at least one display screen of said at least one display device; and,

user controlled input head position means coupled to said computer, the position means generating said position control signal as an input to said computer to selectively change said selected viewing location.

The Examiner relies on the following references:

MacKay et al.            5,148,154                            Sep. 15, 1992  
(MacKay)

Price et al.            GB 2,206,421                            Jan. 5, 1989  
(Price)

Fisher et al. (Fisher), "Virtual Environment Display System",  
ACM Interactive 3D Graphics, Oct. 1986, pp. 1-11.

Claims 1 through 4 and 7 through 10 stand rejected under  
35 U.S.C. § 103 as being unpatentable over Price in view of  
MacKay.

Claims 5 and 6 stand rejected under 35 U.S.C. § 103 as  
being unpatentable over Price in view of MacKay and further in  
view of Fisher.

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Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the brief and answer for the respective details thereof.

**OPINION**

After a careful review of the evidence before us, we will not sustain the rejection of claims 1 through 10 under 35 U.S.C. § 103.

The Examiner has failed to set forth a ***prima facie*** case. It is the burden of the Examiner to establish why one having ordinary skill in the art would have been led to the claimed

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invention by the reasonable teachings or suggestions found in the prior art, or by a reasonable inference to the artisan contained in such teachings or suggestions. ***In re Sernaker***, 702 F.2d 989, 995, 217 USPQ 1, 6 (Fed. Cir. 1983).

"Additionally, when determining obviousness, the claimed invention should be considered as a whole; there is no legally recognizable 'heart' of the invention." ***Para-Ordinance Mfg. v. SGS Importers Int'l, Inc.***, 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995) (***citing W. L. Gore & Assocs., Inc. v. Garlock, Inc.***, 721 F.2d 1540, 1548, 220 USPQ 303, 309 (Fed. Cir. 1983), ***cert. denied***, 469 U.S. 851 (1984)).

With respect to claim 1, Appellants argue that the cited references do not disclose or suggest all the elements recited in the claim. Appellants state that the references do not include "a plurality of data windows in a non-overlapping manner" and a virtual screen having "a virtual screen size independent of the size of the display screen." (Brief-page 7.)

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We agree with the Examiner that MacKay "clearly shows" the claimed non-overlapping data windows, and Price's screen image 33, which is not dependent on screen size 31, reads on the "independent size" recitation. (Answer-page 8.)

Appellants argue that the references are from non-analogous arts, and therefore not combinable. Appellants contend that Price is designed for use by aircraft pilots, and MacKay is designed for use in coordinating multi-media systems, such as film editing. (Brief-page 10.) We note that Appellants have not alleged an art area for their own invention.

The Examiner responds that the arts are analogous in that both references utilize eye goggle displays (answer-page 10). We agree with the Examiner even more generically, in that both references deal with displaying computer generated information. Additionally, we note Appellants' own specification states:

Numerous computer systems and data display systems can benefit from the virtual screen of the present invention. This includes air traffic control (both operations and training), heterogeneous database visualization, multi-media database visualization,

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tactical situation assessment and command and control, business management and visualization, medical information visualization, distributed interactive simulation, and complex intelligence data analysis. (Page 5, line 25 to page 6, line 5.)

Lastly, Appellants argue there is no disclosure or suggestion to combine the two references. (Brief-pages 10 and 11.)

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The Examiner's rejection states:

Therefore, it would have been obvious to one of ordinary skill in the art at the time [the] invention was made to have substituted the technique of displaying object oriented window environments surrounding the user as taught by MacKay to the technique of displaying [the] two overlapping display information of Price **so as to avoid the information being blocked from view of the user.** [Emphasis added.] [Answer-pages 5 and 6.]

We see nothing in the references, and the Examiner has not indicated where the references teach or suggest a desire **to avoid the information being blocked from view of the user.** We can only assume this objective was gleaned from Appellants' disclosure.

The Federal Circuit states that "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." ***In re Fritch***, 972 F.2d 1260, 1266 n.14, 23 USPQ2d 1780, 1783-84 n.14 (Fed. Cir. 1992), ***citing In re Gordon***, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). "Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor." ***Para-Ordnance Mfg. v. SGS***

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*Importers Int'l*, 73 F.3d at 1087, 37 USPQ2d at 1239, **citing** *W. L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d at 1551, 1553, 220 USPQ at 311, 312-13.

As pointed out above, the record is devoid of any reason to combine the references other than Appellants' disclosure. Such hindsight use of Appellants' disclosure is impermissible. Since there is no evidence in the record that the prior art suggested the desirability of such a combination, we will not sustain the Examiner's rejection of claim 1.

The remaining claims on appeal also contain the above limitations discussed in regard to claim 1 and thereby, we will not sustain the rejection as to these claims.

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We have not sustained the rejection of claims 1 through 10 under 35 U.S.C. § 103. Accordingly, the Examiner's decision is reversed.

**REVERSED**

JAMES D. THOMAS	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
	)	BOARD OF PATENT
KENNETH W. HAIRSTON	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
	)	
	)	
	)	
STUART N. HECKER	)	
Administrative Patent Judge	)	

SNH/sld

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PATENT DOCKET ADMINISTRATION  
HUGHES ELECTRONICS  
BLDG. CO1/A126  
P.O. BOX 80028  
LOS ANGELES, CA 90080-0028

# ***Shereece***

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REVERSED

Prepared: April 25, 2001