

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was **not** written for publication in a law journal and (2) is **not** binding precedent of the Board.

Paper No. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

Ex parte MOTOSHI MIZOGUCHI and MASAHIKO ITO

---

Appeal No. 1998-0878  
Application No. 08/322,749

---

ON BRIEF

---

Before THOMAS, JERRY SMITH and RUGGIERO, Administrative Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 2-29, which constitute all the claims remaining in the application.

The disclosed invention pertains to a head-mounted image display apparatus wherein images from a pair of image display means are respectively provided to the left and right eyes of a user.

Appeal No. 1998-0878  
Application No. 08/322,749

Representative claim 10 is reproduced as follows:

10. A head-mounted image display apparatus wherein images from a pair of image display means provided in a device body are respectively provided to left and right eyes of a user in enlarged form, each image passing along an optical path including a reflector means disposed between a respective image display means and an ocular lens corresponding to each respective left and right eye, comprising:

a pair of optical visual units, each visual unit respectively housing one of said image display means, said reflector means and said ocular lenses; and

mounting means for adjustably mounting said pair of optical visual units along a horizontal direction, wherein said optical visual units are respectively movable toward and away from each other along the horizontal direction, and each of said image display means is independently movable with respect to its respective optical visual unit;

further comprising focusing means for moving each image display means in a vertical direction perpendicular to the horizontal direction relative to said respective optical visual unit.

The examiner relies on the following references:

Katoh	5,034,809	July 23, 1991
Yamauchi et al. (Yamauchi)	5,276,471	Jan. 04, 1994 (filed May 08, 1991)
Suwa et al. (Suwa) (European Application)	0 438 362	July 24, 1991
Hosio et al. (Hosio) (PCT International Application)	WO 92/07292	Apr. 30, 1992

Appeal No. 1998-0878  
Application No. 08/322,749

The following rejections are before us on appeal:

1. Claims 2-5, 8-15, 18-21 and 24-29 stand rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Suwa in view of Hosio.

2. Claims 6, 7, 16 and 17 stand rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Suwa in view of Hosio and Katoh.

3. Claims 22 and 23 stand rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Suwa in view of Hosio and Yamauchi.

Rather than repeat the arguments of appellants or the examiner, we make reference to the brief and the answer for the respective details thereof.

#### OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the examiner and the evidence of obviousness relied upon by the examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellants' arguments set forth in the brief along with the examiner's

Appeal No. 1998-0878  
Application No. 08/322,749

rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claims 2-29. Accordingly, we reverse.

We consider first the rejection of claims 2-5, 8-15, 18-21 and 24-29 under 35 U.S.C. § 103 based on the teachings of Suwa and Hosio. Of these claims, claims 2-4, 8-10, 12, 13, 18-21 and 24-27 stand or fall together as a single group [brief, page 7]. We will consider the rejection with respect to independent claim 10 as representative of all the claims in this group.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467

Appeal No. 1998-0878  
Application No. 08/322,749

(1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See Id.; In re

Appeal No. 1998-0878  
Application No. 08/322,749

Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976). Only those arguments actually made by appellants have been considered in this decision. Arguments which appellants could have made but chose not to make in the brief have not been considered [see 37 CFR § 1.192(a)].

With respect to representative, independent claim 10, the examiner finds that Suwa teaches all the features of this claim except for the focusing means for moving each image display means in a vertical direction relative to the respective optical visual unit. The examiner cites Hosio as teaching a vertical adjustment of the optics to achieve focusing of the image. The examiner concludes that it would have been obvious to the artisan to add Hosio's vertical focusing arrangement to the Suwa display apparatus [answer, pages 4-5].

Appellants argue that the image display means of Suwa are not independently movable with respect to the optical visual units, and appellants assert that there would be no motivation

Appeal No. 1998-0878  
Application No. 08/322,749

to provide the Hosio arrangement in Suwa because Suwa teaches away from the need for a separate focusing arrangement [brief, pages 9-12].

We agree with appellants. Although the concepts of horizontal adjustment for pupil distance and vertical adjustment for focusing are individually known, the examiner's proposed combination of Suwa and Hosio makes no sense. First, as pointed out by appellants, the image display means (33) of Suwa are simply not movable with respect to the optical visual units (22A and 22B). The examiner's attempt to find implied focusing in Suwa is unsupported by the disclosure of Suwa. The Suwa device is designed to have a constant focal length of about 20 mm. Any attempt to adjust the focus of the optics in Suwa would defeat the very purpose of Suwa's invention. Thus, we agree with appellants that there is no basis for combining the teachings of Suwa and Hosio in the manner proposed by the examiner.

Hosio also fails to teach independent movement of an image display means with respect to respective optical visual units. The image display means in Hosio is outside the spectacle apparatus. Only the reflected image in Hosio is

Appeal No. 1998-0878  
Application No. 08/322,749

adjusted to achieve focusing. In Suwa as well as in the claimed invention, the image display means (liquid crystal display) is located within the optical visual unit of the head-mounted display apparatus. Thus, the claimed invention recites independent movement of the display means and not the optics associated with the display means. Thus, even if the teachings of Suwa and Hosio could be combined in a logical manner, the invention as recited in claim 10 still would not result.

In summary, the examiner's analysis of the teachings of Suwa and Hosio is incorrect, and the proposed modification of Suwa with the teachings of Hosio would defeat the purpose for which Suwa was designed. Therefore, we will not sustain the rejection of claims 2-4, 8-10, 12, 13, 18-21 and 24-27 which stand or fall together as a single group.

Although claims 5, 11, 14, 15, 28 and 29 are argued separately, these claims either depend from claim 10 or contain the same recitations of claim 10 discussed above (independent claim 28). Since the limitations of claim 10 are also included in each of these claims, we do not sustain the

Appeal No. 1998-0878  
Application No. 08/322,749

rejection of any of these claims for the same reasons discussed above.

We now consider the rejection of claims 6, 7, 16 and 17 based on the teachings of Suwa in view of Hosio and Katoh. Independent claims 6 and 16 contain language similar to the language of claim 10 considered above. Since Katoh does not remove the deficiencies of the proposed combination of Suwa and Hosio discussed above, we do not sustain the rejection of any of these claims.

Finally, we consider the rejection of claims 22 and 23 based on the teachings of Suwa in view of Hosio and Yamauchi. These claims depend from claim 10. Since Yamauchi does not remove the deficiencies of the proposed combination of Suwa and Hosio discussed above, we do not sustain the rejection of either of these claims.

Appeal No. 1998-0878  
Application No. 08/322,749

In summary, we have not sustained any of the examiner's rejections of the appealed claims under 35 U.S.C. § 103. Therefore, the decision of the examiner rejecting claims 2-29 is reversed.

REVERSED

JAMES D. THOMAS	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
	)	BOARD OF PATENT
JERRY SMITH	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
	)	
	)	
	)	
JOSEPH F. RUGGIERO	)	
Administrative Patent Judge	)	

js/jg

Appeal No. 1998-0878  
Application No. 08/322,749

RONALD P. KANANEN, ESQ.  
RADER, FISHMAN & GRAUER, P.L.L.C.  
1233 20TH STREET, NW  
SUITE 501  
WASHINGTON, DC 20036

