

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today was not written for publication in a law journal and is not binding precedent of the Board.

Paper No. 12

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RICHARD HOLMES

Appeal No. 1997-2770
Application No. 08/329,994

ON BRIEF

Before HAIRSTON, FLEMING, and GROSS, Administrative Patent Judges.

GROSS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 through 19, which are all of the claims pending in this application.

Appellant's invention relates to a human/computer interface device for use with a computer system running a virtual reality software applications program. The device

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includes portions which encircle the wrist and the palm of a user's hand, a deformable, flexible member connecting the wrist and palm encircling portions, at least one elongate resilient rib member coextensive with a finger of the user's hand, and an annular ring adjacent and attached to the free end of the rib member. Claim 15 is illustrative of the claimed invention, and it reads as follows:

15. A manually operable exo-skeletal human/computer interface device for a computer system comprising a wrist encircling means being adapted in use to be proximate to and generally relatively fixed around the associated wrist of one hand of a user, an overhand member in use overlying the back of said hand and a deformable member flexibly connecting said wrist encircling means to said overhand member, further comprising at least one elongate generally resilient rib member extending at a fixed end thereof from said overhand member so as to be generally coextensive with at least one finger of said hand in order to function in the form of an exoskeleton thereto, adjacent a free end of said rib member and spaced therealong from the overhand member at least one annular ring formation which is adapted in use to receive and engage at least one finger of the said hand, and at least one position sensor of the computer system fixed relative to at least one of the said members.

The prior art reference of record relied upon by the examiner in rejecting the appealed claims is:

Richter
1986

4,575,297

Mar. 11,

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Claims 1 through 19 stand rejected under 35 U.S.C. § 103 as being unpatentable over Richter.

Reference is made to the Examiner's Answer (Paper No. 9, mailed September 16, 1996) for the examiner's complete reasoning in support of the rejection, and to appellant's Brief (Paper No. 8, filed August 22, 1996) and Reply Brief (Paper No. 10, filed November 18, 1996) for appellant's arguments thereagainst.

OPINION

We have carefully considered the claims, the applied prior art reference, and the respective positions articulated by appellant and the examiner. As a consequence of our review, we will reverse the obviousness rejection of claims 1 through 19.

Each of the independent claims, claims 1, 4, 7, 12, and 15, recites a wrist encircling means. The examiner asserts (Answer, page 3) that Richter's element 3 meets this limitation. However, as pointed out by appellant (Brief, pages 9-10), element 3 is a lower arm member, and does not encircle the wrist. As shown in Richter's Figure 1, element 3 ends above the wrist and is attached to the glove portion of

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the device at joint 47, which is approximately at the location of the wrist. Accordingly, Richter lacks the claimed wrist encircling means.

In addition, the examiner states (Answer, page 3) that "[o]bviously, 3 could be secured to 5 by straps." It appears that the examiner meant member 6 rather than operator 5, since the claims call for a connection between the wrist and palm encircling means, which the examiner equates with elements 3 and 6, respectively. In either case, the standard for obviousness is not what could have been done, but rather what would have been obvious to the skilled artisan. The examiner has failed to provide any evidence of or convincing line of reasoning for the obviousness of using straps instead of a knuckle joint.

Each independent claim also recites a generally resilient rib member which is generally coextensive with a finger. The examiner contends (Answer, page 3) that the cables of Richter "can be considered rib members." As argued by appellant (Brief, page 13), though, the 'relatively stiff cable lines' are neither generally resilient ribs nor coextensive with the

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finger (see elements 19-24 in Richter's Figure 2). Thus, Richter fails to meet the claimed rib members.

Lastly, the examiner points to members 13-15 as the claimed ring members. However, elements 13 and 14 are not located at a free end of the rib member, as required by the claims, and element 15 is "a hollow, closed ended finger member 15 which more resembles a thimble than an 'annular ring formation'" (see Brief, page 14). Therefore, Richter lacks the ring members recited in each independent claim. Since Richter does not disclose each and every element of the claims, and the examiner has provided no evidence of or reasoning for the obviousness of the missing elements, the examiner has failed to present a prima facie case of obviousness. Accordingly, we cannot sustain the rejection of independent claims 1, 4, 7, 12, and 15, nor of their dependents, claims 2, 3, 5, 6, 8 through 11, 13, 14, and 16 through 19.

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CONCLUSION

The decision of the examiner rejecting claims 1 through
19 under 35 U.S.C. § 103 is reversed.

REVERSED

KENNETH W. HAIRSTON)	
Administrative Patent Judge)	
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)	
)	
)	BOARD OF PATENT
MICHAEL R. FLEMING)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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ANITA PELLMAN GROSS)	
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