

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(2) is not binding precedent of the Board.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. 11

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ARNO ROHRINGER
and MANFRED ROMBOLD

Appeal No. 99-2124
Application 08/844,830¹

ON BRIEF

Before MEISTER, ABRAMS, and BAHR, Administrative Patent Judges.

ABRAMS, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the decision of the examiner finally rejecting claims 1-4, which constitute all of the claims of record in the application.

¹ Application for patent filed April 22, 1997.

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The appellants' invention is directed to a steering reaction force control arrangement for a power steering system. The claims on appeal have been reproduced in an appendix to the Brief.

THE REFERENCES

The references relied upon by the examiner to support the final rejection are:

Adams et al. (UK '697)	2 044 697	Oct. 22, 1980
Adams (UK '000)	2 199 000	Jun. 29, 1988

THE REJECTIONS

Claims 1, 3 and 4 stand rejected under 35 U.S.C. § 103 as being unpatentable over UK '000.²

Claim 2 stands rejected under 35 U.S.C. § 103 as being unpatentable over UK '000 in view of UK '697.

Rather than attempt to reiterate the examiner's full commentary with regard to the above-noted rejection and the

² We note that there is no proper antecedent for "said guide sleeve" in lines 19-20 of claim 1. It would appear that this should read --said sleeve structure--. In any event, this should be corrected.

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conflicting viewpoints advanced by the examiner and the appellants with regard thereto, we make reference to the final rejection (Paper No. 7) and to the Appellants' Brief (Paper No. 9).

OPINION

The test for obviousness is what the combined teachings of the prior art would have suggested to one of ordinary skill in the art. See, for example, ***In re Keller***, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). In establishing a *prima facie* case of obviousness, it is incumbent upon the examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. See ***Ex parte Clapp***, 227 USPQ 972, 973 (Bd. Pat. App. & Int. 1985). To this end, the requisite motivation must stem from some teaching, suggestion or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from the appellant's disclosure. See, for example, ***Uniroyal, Inc. v. Rudkin-Wiley Corp.***, 837

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F.2d 1044, 1052, 5 USPQ2d 1434, 1439 (Fed. Cir.), *cert. denied*, 488 U.S. 825 (1988).

The appellants' invention is directed to a steering reaction force control arrangement for a hydraulic servo valve of a power steering system. During the assembly of such devices, it is necessary to provide a mechanism for allowing rotational adjustment of a control sleeve and an adjacent sleeve structure with respect to one another so they are in proper relationship prior to fixedly attaching them together. In furtherance of this, independent claim 1 requires, *inter alia*, a control sleeve and a sleeve structure, each

having cooperating conically shaped adjacent end portions, one being provided with an outer cone structure and the other with an inner cone structure by which they are engaged with one another in an angular position

In operation, the inner and outer cone structures are loosely placed together so that at least one can be rotated until it is in the proper relationship with the other, whereafter they are pressed together to establish a tight fit that precludes relative rotation.

The examiner has rejected this claim as being unpatentable over UK '000, which also is directed to a

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steering reaction control arrangement and which also focuses on solving the same problem. The reference discloses a system wherein a right annular collar (17) is attached to the end of the control sleeve (16) by means of a pin (19) and slot (20) connection, and this collar fits inside a right annular recess (18) on the adjacent end of the carrier sleeve (10a). The control sleeve and the collar therefore can be rotated together with respect to the recess in the carrier sleeve. When proper alignment is achieved, the collar "is locked to the carrier sleeve 10a by any convenient means such as welding, bonding, peening or pinning so that the sleeve 16 and carrier 10 will then rotate in unison" (page 9, lines 21-24).

UK '000 clearly does not disclose or teach the claimed inner and outer cone structures which permit relative rotation until alignment is achieved and then can be pressed together to lock the components in place. Even though this was pointed out by the appellants in the remarks accompanying the first amendment (Paper No. 6) and in the Brief, the examiner has not explained why this feature would have been obvious in view of UK '000, and we are unable to determine this on our own. It

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therefore is uncontroverted on the record that this structure is not present in UK '000.

With regard to the issue of press fitting, we first point out that the mere fact that the prior art structure could be modified does not make such a modification obvious unless the prior art suggests the desirability of doing so. See ***In re Gordon***, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). We fail to perceive any teaching, suggestion or incentive which would have led one of ordinary skill in the art to replace the system disclosed in UK '000 with a press fit locking system, even accepting, *arguendo*, the examiner's conclusion that press-fitting is an equivalent means to bonding, welding or pinning. This is for two reasons. First, the problem of alignment and subsequent attachment of the two sleeve components already has been solved in UK '000, and the examiner has advanced no reason why the proposed change would be advantageous. Second, such a modification would necessitate a wholesale reconstruction of the UK '000 adjustment and locking system, which would have been a disincentive to one of ordinary skill in the art to do so.

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For the reasons set forth above, it is our conclusion that the teachings of UK '000 fail to establish a *prima facie* case of obviousness with regard to the subject matter of independent claim 1, and we therefore will not sustain the rejection. Since claims 3 and 4 depend from claim 1, it follows that the rejection of those claims cannot be sustained.

The teachings of UK '697, which was added by the examiner in the rejection of claim 2, fail to alleviate the deficiencies pointed out above with regard to claim 1. We thus will not sustain the rejection of claim 2.

Neither rejection is sustained.

The decision of the examiner is reversed.

REVERSED

James M. Meister)
Administrative Patent Judge)
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Neal E. Abrams) BOARD OF
PATENT Administrative Patent Judge) APPEALS AND

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) Jennifer D. Bahr
) Administrative Patent Judge
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Klaus J. Bach
4407 Twin Oaks Lane
Murrysville, PA 15668