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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 26

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte LARS FORSBERG

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Appeal No. 98-2163
Application 08/537,673[1]

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ON BRIEF

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Before McCANDLISH, Senior Administrative Patent Judge, MEISTER and MCQUADE, Administrative Patent Judges.

MEISTER, Administrative Patent Judge.

DECISION ON APPEAL

Lars Forsberg (the appellant) appeals from the final rejection of claims 2-18 and 21-23, the only claims remaining

[1] Application for patent filed January 11, 1996. This application is a U.S. national stage application based on international application PCT/SE94/00333, filed April 15, 1994, under 35 U.S.C. § 371.

in the application.

We REVERSE.

The appellant's invention pertains to a coupling for use with a tubular boom section of an extendible crane boom. Independent claim 18 is further illustrative of the appealed subject matter and a copy thereof may be found in APPENDIX A of the brief.

The references relied on by the examiner are:

Harsch	2,666,417	Jan. 19, 1954
Fischer (Germany)[2]	1 556 601	Mar. 5, 1970

Claims 2-18 and 21-23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Harsch in view of the German publication.[3] According to the examiner:

Figure 6 of Harsch shows a coupling for use with a

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[2] A translation is attached to this decision.

[3] Although the metes and bounds of the claimed subject matter are understandable, we note that the recitation of "***said outer end*** of said double-acting hydraulic cylinder" (emphasis ours) in (1) lines 8 and 9 of claims 21 and 23 and (2) lines 10 and 11 of claim 22 has no clear antecedent basis. In the event of further prosecution before the examiner, this informality is deserving of correction.

> tubular boom section of an extendible crane boom, the tubular boom section comprising a tube (1) having an inner end and an outer end, a holder (14), and a double acting cylinder being attachable to the holder, the coupling comprising a first member (16), a second member (15), and means comprising a plurality of screws for coupling together these members. Harsch varies from the claims by not having the first and second members shaped as part-spherical male and female members. Figure 3 of DE '601 [the German publication] shows a similar screw connection for a hydraulic cylinder with male and female part-spherical members which permit the members to be bolted together in various angular alignments. It would have been obvious to one of ordinary skill in the art to modify the hydraulic cylinder mounting of Harsch by forming the first member (16) as a part-spherical male member, and the second member (15) as a part-spherical female member, to permit the orientation of the cylinder to assume various fixed alignments for small angular adjustments, as taught by DE '601. [Answer, page 3.]

We will not support the examiner's position. While Harsch teaches a coupling for use with a tubular boom section of an extendible crane boom, Harsch's coupling (as the examiner recognizes) comprises first and second plates 15,16 that are attached together by a plurality of screws, with no adjustment whatsoever being provided between the plates. In an attempt to overcome the deficiencies of Harsch, the examiner has relied upon the German publication, contending that it would have been obvious to provide Harsch with a

coupling having part-spherical male and female members for the purpose of permitting Harsch's cylinder to be oriented in "fixed alignments" for small angular adjustments in view of the German publication's teachings.

The German publication, however, does not provide part-spherical male and female members for the purpose of providing "fixed alignments" as the examiner apparently believes. Instead, the German publication is directed to a lift mast for a lift truck wherein the lifting cylinder is mounted on the truck by a coupling having part-spherical male and female parts 3. In order to prevent binding or wedging (i.e, jamming) ***between*** the part-spherical male and female parts ***as they move relative to each other***, these parts are elastically interconnected, thus providing for the "free adjustment" of the lift mechanism (see the first two paragraphs of the translation). To this end, the German publication elastically interconnects the part-spherical male and female parts by (1) a hairpin spring 7 in the embodiment of Figs. 1 and 2, (2) Belleville springs 14 interposed between screws 13 and part 10 in the embodiment of Fig. 3 and (3) an elastomeric member 18 interposed between bracket or abutment 17 and part 15 in the

embodiment of Fig. 4.

There is simply nothing in the combined teachings of Harsch and the German publication which would fairly suggest incorporating the elastic coupling taught by the German publication into the device of Harsch. Moreover, even if the German publication's elastic coupling were incorporated into the device of Harsch, the claimed invention would not result. That is, the resulting structure would not ***prevent*** pivotal movement of the double-acting hydraulic cylinder relative to the holder when the plurality of screws are tightened as expressly required by each of the independent claims on appeal.

The decision of the examiner to reject claims 2-18 and 21-23 under 35 U.S.C. § 103(a) based on the combined teachings of Harsch and the German publication is reversed.

REVERSED

Harrison E. McCandlish, Senior Administrative Patent Judge	)	
James M. Meister Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
John P. McQuade Administrative Patent Judge	)	

tdc

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