

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

**MAILED**

*Ex parte* GORDON JONES

APR 27 1995

**PAT.&T.M.OFFICE  
BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Appeal No. 95-1719  
Application 08/032,837<sup>1</sup>

ON BRIEF

Before LYDDANE, MEISTER, and STAAB, *Administrative Patent Judges*.  
STAAB, *Administrative Patent Judge*.

*DECISION ON APPEAL*

Gordon Jones ("appellant") appeals from the final rejection of claims 29-31 and 33-35. Claim 32, the only other

<sup>1</sup> Application for patent filed March 10, 1993. According to appellant, the application is a continuation of Application 07/956,476, filed October 2, 1992, now abandoned, which is a continuation of Application 07/682,928, filed April 9, 1991, now abandoned.

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claim remaining in the application, has been indicated as being allowable subject to the requirement that it be rewritten in independent form. We reverse.

The appellant's invention pertains to a quick coupling for use in attaching an implement to the boom of a piece of heavy equipment. Independent claim 33 is illustrative of the subject matter at issue and reads as follows:

33. A quick coupler for attaching implements to heavy equipment having a boom that includes a stick and an implement linkage, said quick coupling comprising:

- (a) a bracket attached to the implement;
- (b) a coupler attached to the boom;
- (c) said coupler being rotatably attached to said stick and to said implement linkage through separate axes;
- (d) said coupler having a coupling element that is coaxial with the axis through which said coupler is attached to said stick;
- (e) said bracket having a receptacle that releasably receives said coupling element and allows said bracket to be rotated relative to said coupler about the axis through which said coupler is attached to said stick;
- (f) said bracket having a first planar surface defined thereon;
- (g) said coupler having a second planar surface defined thereon;
- (h) said first and second surfaces being oriented to overlappingly engage one another when said coupling element is placed in said receptacle;

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(i) said first and second surfaces being angularly offset from a plane that is normal to a plane that extends through the axis through which said coupler is attached to said stick and bisects said second surface so that the interaction of said first and second surfaces causes said coupling element to be urged into said receptacle when said bracket is rotated toward said coupler; and

(g) [sic, (j)] means for rotating said bracket toward said coupler.

The references of record relied upon by the examiner in support of rejections under 35 U.S.C. § 102(b) and 35 U.S.C. § 103 are:

Heimmermann	3,556,323	Jan. 19, 1971
Knackstedt	4,955,779	Sept. 11, 1990

Claims 29, 30, 33 and 34 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Heimmermann.

Claims 31 and 35 stand rejected under 35 U.S.C. § 103 as being unpatentable over Heimmermann in view of Knackstedt.

Rather than reiterate the examiner's statement of the rejections and the arguments of the examiner and the appellant in support of their respective positions, reference is made to the answer and the brief on appeal for the full exposition thereof.

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OPINION

"Anticipation is established only when a single prior art reference discloses, expressly or under principles of inherency, each and every element of a claimed invention." *RCA Corp. v. Applied Digital Data Systems, Inc.* 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.), cert. dismissed, 468 U.S. 1228 (1984). As for functional language appearing in the claims, the prior art reference must at least reasonably appear to be capable of performing the recited function. See *In re Mott*, 557 F.2d 266, 194 USPQ 305 (CCPA 1977) and *Ex parte Cordova*, 10 USPQ2d 1949 (BPAI 1988). Also see *In re Swinehart*, 439 F.2d 210, 169 USPQ 226 (CCPA 1971).

Considering first the examiner's rejection of claims 29, 30, 33 and 34 as being anticipated by Heimmermann, each of the independent claims on appeal calls for a quick coupler comprising a bracket having a first planar surface (element 66), a coupler having a second planar surface (element 33) which overlappingly engage one another when the coupling element of the coupling is placed in the receptacle of the bracket, and means (wedge 38 and cam surface 64) for rotating the bracket toward the

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coupler. The planar surfaces are oriented such that, in the words of claim 33, "the interaction of said first and second surfaces causes said coupling element to be urged into said receptacle when said bracket is rotated toward said coupler." Specifically, and with reference to application FIG. 2, the first and second surfaces are required to be "angularly offset from a plane that is normal to a plane that extends through the axis through which said coupler is attached to said stick and bisects said second surface" (claim 33, paragraph (i)).

The operation of the appellant's device is explained in the paragraph spanning pages 2 and 3 of the specification as follows:

The operative face of the wedge interacts with cam surfaces on the bracket such that the bracket is pulled snugly against the coupler when the wedge is moved downwardly in the track. As the bracket moves toward the coupler, overlapping surfaces on the respective elements cause the bosses to be urged downwardly into the receptacles. Thus, when the wedge is moved downwardly by the piston cylinder, the coupler and bracket are snugly joined.

In rejecting the claims, the examiner has found, and the appellant has not disputed, that the elements 16, 23, 29 and 35 of Heimmermann correspond to the coupler, coupling element,

bracket and receptacle, respectively, of the claimed device. With regard to the means for rotating the bracket toward the coupler, and the first and second planar surfaces oriented to overlappingly engage one another and cause the coupling element to be urged into the receptacle when the bracket is rotated toward the coupler, it appears to be the examiner's position that the surface 33 of Heimmermann on the bracket 29 corresponds to the claimed first planar surface, that the bottom side of the coupler part 21 of Heimmermann corresponds to the claimed second planar surface, and that the inclined surface 54 and slots 55, 57 of Heimmermann correspond to the claimed means for rotating the bracket toward the coupler. See page 3 of the answer. In support of this position, the examiner states that

the wedge in Hiemmerman [sic] when tighten[ed] will move trunnions 22 and 23 against the inner surfaces of head portions 35 and 36 with the help of surface 33 of the bracket and the bottom surface of the coupler 21. . . . This is because when the nut 63 is tightened the wedge which is attached to the coupler by the shaft 61 with [sic, will] pull trunnions 24 and 25 against surfaces 42 which will cause trunnion [sic, trunnions] 22 and 23 to move up along the inner surfaces of heads 35, 36. Appellant's assertion in lines 18-22 that the insertion of the wedge does not move one of the elements relative to the other does not appear well founded since the wedge would pull the coupling 19, 21 toward

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the [seat] 42 on the bracket since 61 in [sic, is] attached to the coupling 19, 21 and nut 63 wedges 54 in surfaces 55. Regarding appellant's comments in lines 8-10 on page 7 of his brief as to a lack of means for rotating, note the movement of trunnions 24, 25 along curved surfaces 42 when 63 is tightened would cause trunnions 22 and 23 in Heimmermann to move along the inner surfaces of heads 35, 36 [answer, page 5].

We cannot accept the examiner's position. First of all, it appears to us that the bottom surface of coupler part 21 (which the examiner equates with the claimed second planar surface) does not engage the top surface of element 33 (which the examiner equates with the claimed first planar surface), when the coupler 16 and bracket 29 are fully engaged. This is so because, as clearly seen in FIG. 8 of Heimmermann, the coupler parts 21 are positioned *inside* of the bracket bars 33, 34. Furthermore, it appears to us that the bottom surfaces of coupler part 21 also does not engage the top (unnumbered) surface of the implement 28 when the coupler 16 and bracket 29 are fully engaged. In this regard, we note that in FIG. 9, the lower edge of coupler part 21 is shown in phantom line as being spaced from the top surface of the implement. Moreover, even if we assume that the bottom surface of coupler part 21 does engage a portion of the bracket or implement when the coupler and bracket are in the fully

engaged FIG. 3 position, it is not at all clear how the interaction of the first and second planar surfaces would operate to cause the coupling element 23 to be urged into the receptacle 35, as called for in the claims, notwithstanding the examiner's assertion that these surfaces would somehow function to "help" accomplish such a seating operation.

To the extent that the examiner's anticipation rejection may be viewed as being founded on the position that interaction between the inclined surfaces 54 and notches 55, 57 operate in a manner which satisfies the functional language of the independent claims, we must also disagree. Initially, we observe that if portions of the inclined surfaces 54 and notches 55, 57 are viewed as corresponding to the claimed first and second planar surfaces, then it is not clear what portions of Heimmermann would constitute the claimed means for rotating the bracket toward the coupler as called for in paragraph (g) of independent claim 29 and paragraph (j) of independent claim 33. Additionally, a reading of Heimmermann's disclosure reveals that, in the event the trunnions 22, 23 are not fully seated in the receptacles 35, 36, it is the interaction between the arcuate seats 42, 43 and the trunnions 24, 25 that urges the trunnions

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22, 23 into receptacles 35, 36 in response to the operator manipulating the controls of ram 11 (column 3, lines 41-57). The lock bar 53 is then manually advanced into the aligned and registering slots 55, 56 to lock the implement to the coupler (column 3, lines 58-61). Accordingly, we find no clear disclosure in Heimmermann that the locking bar 53 and notches 55, 57 are capable of functioning in the manner described in the claims, and it is well established that an anticipation rejection under § 102 cannot be predicated on an ambiguous reference. See *In re Turlay*, 304 F.2d 893, 134 USPQ 355 (CCPA 1962). In view of the foregoing, we cannot sustain the examiner's § 102 rejection of claims 29, 30, 33 and 34 as being anticipated by Heimmermann.

As for the rejection of claims 31 and 35 as being unpatentable over Heimmermann in view of Knackstedt, we have reviewed the Knackstedt reference but find nothing therein which makes up for the above-noted deficiencies of Heimmermann. Therefore, we cannot sustain the examiner's § 103 rejection of claims 31 and 35.

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The decision of the examiner is reversed.

REVERSED

*William E. Lyddane*

WILLIAM E. LYDDANE )  
Administrative Patent Judge )

*James M. Meister*  
JAMES M. MEISTER )  
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