

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte DONALD E. MOORE and STEVEN F. WILMS

Appeal No. 2002-0911
Application No. 09/272,115

ON BRIEF

Before FRANKFORT, NASE and BAHR, Administrative Patent Judges.
BAHR, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1-9. Claims 10-16, the only other claims pending in this application, stand withdrawn from consideration as being directed to a non-elected invention.

We AFFIRM-IN-PART.

BACKGROUND

The appellants' invention relates to a method of self-assembling a crane, without the use of a second crane, utilizing a self-contained lifter. Independent claims 1 and 5 are illustrative of the invention and read as follows:

1. A method of self-assembling a mobile crane having a load handling boom including a base section and at least one extension section, comprising the steps of:

positioning said extension section adjacent the crane;

raising said extension section with a self-contained lifter bodily movable with said base section; and

lowering and placing said extension section in a position for connection to said base section to form said boom,

whereby said crane can be efficiently assembled without an assist crane.

5. A method of self-assembling a mobile crane having a load handling boom including a base section and a plurality of component parts to provide the complete working crane, comprising the steps of:

positioning at least one of said component parts adjacent said crane;

raising said at least one component part with a self-contained lifter bodily movable with said base section;

lowering and placing said at least one component part in a position for connection to said crane; and

connecting said at least one component part to complete said crane,
whereby said crane can be efficiently assembled without an assist crane.

The examiner relied upon the following prior art references of record in rejecting the appealed claims:

Batson et al. (Batson)	2,784,850	Mar. 12, 1957
Newell	3,929,204	Dec. 30, 1975
Andersson	4,064,615	Dec. 27, 1977
Morrow, Sr. et al. (Morrow)	4,081,081	Mar. 28, 1978
Becker	4,660,731	Apr. 28, 1987
Walker	5,960,970	Oct. 5, 1999 (filed Oct. 15, 1997)
Carter (British patent specification)	981,129	Jan. 20, 1965

The following rejections are before us for review.¹

- (1) Claims 1-9 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which appellants regard as their invention.
- (2) Claims 1 and 5 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Carter.
- (3) Claims 5, 6 and 9 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Walker.
- (4) Claim 5 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Batson.

¹ The plethora of prior art rejections set forth in the final rejection and answer is clearly not in compliance with the instructions set forth in § 706.02 - CHOICE OF PRIOR ART; BEST AVAILABLE (page 700-20) of the Manual of Patent Examining Procedure (MPEP). Nevertheless, in the interest of administrative efficiency, this panel has elected to decide this appeal rather than remand the application to the examiner to select the best prior art rejections.

(5) Claims 5, 6 and 9 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Becker.

(6) Claims 5 and 9 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Newell.

(7) Claims 5-7 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Andersson.

(8) Claims 5, 6 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Morrow.

(9) Claims 1-4, 7 and 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Walker.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the answer (Paper No. 12) for the examiner's complete reasoning in support of the rejections and to the brief and reply brief (Paper Nos. 11 and 13) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the

respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

The indefiniteness rejection

The second paragraph of 35 U.S.C. § 112 requires claims to set out and circumscribe a particular area with a reasonable degree of precision and particularity. In re Johnson, 558 F.2d 1008, 1015, 194 USPQ 187, 193 (CCPA 1977). In making this determination, the definiteness of the language employed in the claims must be analyzed, not in a vacuum, but always in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art. Id.

The examiner considers claims 1-9 to be indefinite because it is unclear as to how appellants are using the terms “self-contained” and “bodily movable with said base section” to define the claimed invention over the prior art (answer, page 3). As discussed infra, the problem appears to be not that these terms are unclear but that appellants, in distinguishing the claims over the applied prior art, seek to assign interpretations to this terminology which are unduly narrow as compared to the usual and conventional meanings of these terms without the support of any specific definition in their specification.

In proceedings before it, the PTO applies to the verbiage of claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of

definitions or otherwise that may be afforded by the written description contained in the appellants' specification. In re Morris, 127 F.3d 1048, 1054, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997). Moreover, absent an express definition in their specification, the fact that appellants can point to definitions or usages that conform to their interpretation does not make the PTO's definition unreasonable when the PTO can point to other sources that support its interpretation. Id., 127 F.3d at 1056, 44 USPQ2d at 1029.

As for the terminology "self-contained," the definition "complete in itself" offered therefor by appellants on page 10 of their brief appears to comport with the usual and customary use of that terminology. Appellants' specification further informs us that the invention is directed to "self-assembly of a traveling crane utilizing a self-contained lifter" (page 1), that the assembly of the crane is accomplished "with a self-contained dedicated lifter in the boom base section" without the need for a separate, attendant crane (page 5), that "the operations can be carried out with a self-contained lifter permanently mounted in the base section of the boom" (pages 5-6), that hydraulic cylinder means "are mounted in a self-contained manner within the base boom section" (page 6), and that a pair of hydraulic cylinders form the lifter and "are self-contained in the base section" (page 9).

Thus, while appellants' specification does disclose that the lifter is self-contained and is permanently mounted in the base section of the boom, it does not set forth a definition of "self-contained" as meaning completely contained within the boom. Based on the underlying disclosure as a whole, we understand "self-contained" as used in

claims 1 and 5 to mean that the lifter is fully contained or mounted on the mobile crane itself.

The terminology “bodily movable with” is not used in appellants’ specification outside of the claims, much less expressly assigned a special definition therein. Thus, in interpreting the claims, this terminology is given its broadest meaning in its ordinary usage. The definition offered by appellants on page 11 of their reply brief, namely, that it means that two related structures are “capable of being moved as a unit” appears reasonable to us and consistent with the ordinary usage of these terms. We therefore accept appellants’ definition and shall use it in interpreting the claims. We note, however, that “bodily movable with” merely requires that the lifter be capable of being moved as a unit with the base section; it does not require that each and every time one of the lifter and base section moves the other necessarily also moves in the same manner and over the same path. Rather, all that is required is that the lifter is capable of being moved as a unit with the base section under some set of circumstances.

For the foregoing reasons, it is our opinion that one of ordinary skill in the art would be able to understand the meaning of the claim terminology alluded to by the examiner so as to ascertain the metes and bounds of the claimed subject matter, thereby fulfilling the definiteness requirement of the second paragraph of 35 U.S.C. § 112. Accordingly, the examiner’s rejection of claims 1-9 under the second paragraph of 35 U.S.C. § 112 is reversed.

The prior art rejections

We turn our attention first to the rejection of claims 1 and 5 as being anticipated by Carter. As illustrated in Figures 1-4, Carter's crane is capable of being erected into an operating condition (Figure 1) and stowed into a traveling position (Figure 4) with the boom folded away into a compact position, without the use of a separate assembly crane. In order to achieve the erection and stowing disclosed by Carter, the main jib head portion 6, 13 of the boom must be attached and detached at one side, using the lug and clevis connections provided, from the main jib hinge portion 4 of the boom. In order to erect the boom from the stowed traveling position shown in Figure 4, the crane is rotated on its turntable to position the main jib head portion 6 on the ground adjacent the crane. Next, the derricking cable system 22, connected to clevis formations 26 carried by the jib head portion, acts as a lifter and raises the jib head portion (extension section) to the position shown in Figure 3. The derricking cable system 22, connected to the clevis formation 23 on the main jib hinge portion 4, then lowers the main jib hinge portion 4 and the main jib head portion (extension section) 6, 13 into a position wherein the main jib head portion 6, 13 is aligned with the main jib hinge portion 4 for connection to the main jib hinge portion 4. The clevis pins are then inserted into the clevis formations to connect the main jib hinge and head portions for crane operation.

With respect to appellants' comments on page 13 of the brief, we recognize that, in the erection method disclosed by Carter, the main jib head portion 6, 13 is hingedly connected at one side to the main jib hinge portion 4 and is not brought to a position adjacent the crane by a separate truck or the like (see brief, page 14). However, we

perceive in claims 1 and 5 neither a requirement that the boom extension or other component part to be connected to the crane be brought to the crane by a separate truck nor a preclusion that the boom extension or other component part be partly connected to the base section prior to the positioning, raising, lowering and connecting steps.

As for appellants' arguments that Carter's derricking cable system 22 includes a winch carried on the upper deck of the crane and thus is not "self-contained" in the base section (main jib hinge portion 4) and "bodily movable with" the base section, as already pointed out above in our discussion of the meaning of these terms with respect to the indefiniteness rejection, "self-contained" merely requires that the lifter be fully contained on the crane, which Carter's derricking cable system is, and "bodily movable with" merely requires that the lifter be capable of being moved as a unit with the base section. In this case, the derricking cable system is capable of being moved as a unit with the main jib hinge section 4 when the crane either rotates on its turntable or is driven along the ground. Neither claim 1 nor claim 5 calls for the lifter to be contained within the base section.

For the foregoing reasons, we find no error in the examiner's determination that the subject matter of claims 1 and 5 is anticipated² by Carter.

² Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention. RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984). In other words, there must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention. Scripps Clinic & Research Found. v. Genentech Inc., 927 F.2d

Turning next to the examiner's rejection of claims 5, 6 and 9 as being anticipated by Walker, we note that the hoist line drum 48 and hoist line 46 work in conjunction with the hydraulic boom hoist cylinders 34 and boom pendants 42, which move the mast and hence adjust the position of the boom 26, to lift and lower components, such as the crawlers 24, for example, into position for connection on the crane. Appellants argue on page 15 of the brief that the winch (hoist line drum 48) is neither "self-contained" with the boom base section (boom butt 30) nor "bodily movable with" the base section. For the following reasons, we do not agree.

First, the hoist line drum 48, hoist line 46, hoist line cylinders 34 and boom pendants 42 are all mounted and fully contained on the crane, which is all that claim 5 requires. Second, when the crane is rotated on its turntable or driven using its crawlers 24 along the ground, the hoist line drum 48, hoist line 46, hoist line cylinders 34 and boom pendants 42 are all capable of being moved as a unit with the boom butt 30 and are thus "bodily movable with" the boom butt (boom base section), as called for in claim 5.

Accordingly, appellants' arguments are unpersuasive of any error on the part of the examiner in determining that claim 5 is anticipated by Walker. Thus, we shall

² (...continued)
1565, 1576, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991). It is not necessary that the reference teach what the subject application teaches, but only that the claim read on something disclosed in the reference, i.e., that all of the limitations in the claim be found in or fully met by the reference. Kalman v. Kimberly Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984).

sustain the rejection of claim 5 as being anticipated by Walker. As appellants have elected not to argue the patentability of claims 6 and 9 apart from claim 5, these claims fall with claim 5. See In re Young, 927 F.2d 588, 590, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991); In re Wood, 582 F.2d 638, 642, 199 USPQ 137, 140 (CCPA 1978). Thus, we shall also sustain the rejection of claims 6 and 9 as being anticipated by Walker.

The examiner has also rejected claims 1-4, 7 and 8 as being unpatentable over Walker. The examiner concedes that Walker does not specify that the boom sections are also removed from transport trailers and then lowered to the ground for pre-assembly to the boom butt 30, but contends that Walker's broad teaching of using the base section (boom butt 30) to lift other components from their transport trailers would have suggested to one of ordinary skill in the art using the boom butt 30, and presumably the hoist line drum 48, hoist line 46, hoist line cylinders 34 and boom pendants 42, to also lift the boom extension sections (boom top 28 and any boom inserts 32) from their transport trailers and position them for connection to the boom butt 30 (answer, page 6). Appellants do not challenge the examiner's position and it seems quite reasonable to us.

With respect to claims 1, 2, 7 and 8, appellants merely repeat their argument that the hoist line drum 48 is not "self-contained" in and "bodily movable with" the base section (boom butt 30), as called for in claim 1. This argument is unpersuasive with respect to these claims for the same reasons discussed above with regard to claim 5.

We thus shall sustain the rejection of claims 1, 2, 7 and 8 as being unpatentable over Walker.

With regard to claim 3, appellants correctly point out that the structure in Walker which responds to the “lifter” recited in claim 3 does not include “at least one hydraulic cylinder mounted inside the base section” as also called for in claim 3. Even if the hydraulic boom hoist cylinders 34 are deemed to be part of the claimed “lifter,” they are certainly not mounted inside the base section (boom butt 30). As the examiner has not addressed this limitation specifically and we find no suggestion in Walker to so mount the cylinders 34, Walker is insufficient to establish a prima facie case of obviousness of the subject matter of claim 3. We thus shall not sustain the rejection of claim 3 as being unpatentable over Walker.

As for claim 4, appellants argue that it is the hoist line drum 48, and not hydraulic cylinders 34, which lift the component parts. We do not agree. The boom hoist cylinders 34, by lifting and lowering the boom butt 30, also contribute, in conjunction with the hoist line drum 48 and hoist line 46, to lifting and lowering the component parts. Thus, appellants’ argument does not persuade us of any error on the part of the examiner in determining that the subject matter of claim 4 is unpatentable over Walker. We shall thus sustain the rejection of claim 4 as being unpatentable over Walker.

The appellants’ arguments with respect to the examiner’s rejections based on Batson, Becker, Newell and Morrow, namely, that the structure in each of these references which responds to the “lifter” in appellants’ claim 5 is not “self-contained” in

and “bodily movable with” the base section as called for in claim 5, also stem from an unduly narrow interpretation of the terms “self-contained” and “bodily movable with” as discussed above and are as unpersuasive with regard to these rejections as they were with regard to the rejections based on Carter and Walker. In particular, Batson’s hoisting unit C, though housed within the upper deck A, is mounted and fully contained on the crane (loader), thus being “self-contained,” and is capable of being moved as a unit with (i.e., “bodily movable with”) the boom B when the loader is rotated about its base 13 or when the loader is driven along the ground. Similarly, whether Becker’s lifting cylinder 21 or the main lifting winch 44 is considered the “lifter” as recited in claim 5, both of these elements are mounted on and fully contained on the crane, thus meeting the “self-contained” limitation, and are capable of being moved as a unit with (i.e., “bodily movable with”) the boom 26 when the superstructure 5 is rotated about the vertical axis 6 and when the crane is driven along the ground. Newell’s hydraulic lift cylinders 44, which the examiner calls the “lifter,” and the winch 46 and cable 49, which also assist in lifting component parts, such as crawlers 76a, 76b, are both mounted on and fully contained on the crane, thus meeting the “self-contained” limitation, and are capable of being moved as a unit with (i.e., “bodily movable with”) the main boom section 40a (base section) when the cab 30 is rotated about its chassis 22 and when the crane is driven using its crawlers 76a, 76b. Finally, whether Morrow’s hydraulic cylinders 32 or drums 42, 47 are considered the “lifter” as recited in claim 5, all of these elements are mounted on and fully contained on the crane, thus meeting the “self-

contained” limitation, and are capable of being moved as a unit with (i.e., “bodily movable with”) the base section (boom 24) when the upper works 13 is rotated about the lower works 12 or when the crane is driven along the ground using traction assemblies 15.

For the foregoing reasons, we shall sustain the rejections of claim 5 as being anticipated by Batson, of claim 5, and claims 6 and 9 which appellants have not argued separately from claim 5, as being anticipated by Becker, of claim 5, and claim 9 which appellants have not separately argued apart from claim 5, as being anticipated by Newell and of claim 5, and claims 6 and 9 which appellants have not separately argued apart from claim 5, as being unpatentable over Morrow.

We shall not, however, sustain the rejection of claims 5-7 as being anticipated by Andersson. Quite simply, we do not consider the tower crane of Andersson to be “a mobile crane” or the carrying cradle, comprising counterweight 1 and frames 2-4, to be “a handling boom including a base section” as called for in claim 5, and hence in claims 6 and 7 which depend from claim 5.

CONCLUSION

To summarize, in this decision we have:

- (1) reversed the rejection of claims 1-9 under the second paragraph of 35 U.S.C. § 112;
- (2) sustained the rejection of claims 1 and 5 as being anticipated by Carter;
- (3) sustained the rejection of claims 5, 6 and 9 as being anticipated by Walker;
- (4) sustained the rejection of claim 5 as being anticipated by Batson;

- (5) sustained the rejection of claims 5, 6 and 9 as being anticipated by Becker;
- (6) sustained the rejection of claims 5 and 9 as being anticipated by Newell;
- (7) reversed the rejection of claims 5-7 as being anticipated by Andersson;
- (8) sustained the rejection of claims 5, 6 and 9 as being unpatentable over Morrow; and
- (9) sustained the rejection of claims 1-4, 7 and 8 as being unpatentable over Walker as to claims 1, 2, 4, 7 and 8 and reversed the rejection as to claim 3.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

CHARLES E. FRANKFORT)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
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Administrative Patent Judge)	AND
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