Case: 15-1533 Document: 1-2 Page: 25 Filed: 04/08/2015 (26 of 91)

## UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

GENESIS ATTACHMENTS, LLC Requester, Respondent

V.

ALLIED ERECTING AND DISMANTLING CO., INC., et al. Patent Owner, Appellant

Appeal 2014-001006

Inter partes Reexamination Control 95/001,352
Patent US 7,121,489 B2<sup>1</sup>
Technology Center 3900

Before JEFFREY B. ROBERTSON, DANIEL S. SONG and RAE LYNN P. GUEST, Administrative Patent Judges.

SONG, Administrative Patent Judge

NEW DECISION UNDER 37 C.F.R. § 41.77(f)

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<sup>&</sup>lt;sup>1</sup> Patent US 7,121,489 B2 (hereinafter "'489 patent") issued October 17, 2006 to Ramun.

Appeal 2014-001006 Reexamination Control 95/001,352 Patent US 7,121,489 B2

## STATEMENT OF THE CASE

The '489 patent of the present appeal was the subject of *inter partes* reexamination Appeal 20120-007030 (hereinafter "'7030 Appeal") for which the Board's decision was mailed on September 4, 2012 (hereinafter "'7030 Decision"). In the '7030 Appeal, the Requester appealed the Examiner's patentability determinations of claims 1-21 and the Examiner's decision to not adopt 9 rejections proposed by the Requester. The Board affirmed the Examiner's decision to not adopt 7 of the 9 proposed rejections, reversed the Examiner's decision not to adopt a proposed obviousness rejection of claims 1-3, 13-14 and 17-20, and remanded the case to the Examiner for further consideration of the remaining proposed rejection for dependent claims 4-12, 15, 16 and 21 ('7030 Decision 36-37). Pursuant to 37 C.F.R. § 41.77(a)-(b), the decision to reverse the Examiner's patentability determination was designated as a "new ground of rejection." (*Id.*).

The Patent Owner opted to reopen prosecution pursuant to 37 C.F.R. § 41.77(b)(1) in its Response to Decision on Appeal on October 18, 2012 (hereinafter "Resp. to Decision"), submitting arguments and amendments to independent claims 1, 7, 17-19 to recite that the bridge housing is separate from the movable blades (Resp. to Decision 3-7). Independent claims 20 and 21 were not amended. The Patent Owner also submitted a declaration from the inventor Mr. Ramun (hereinafter "Second Decl. of Ramun") with exhibits in support of its arguments. The Requester

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<sup>&</sup>lt;sup>2</sup> The '7030 Decision was issued by the Board of Patent Appeals and Interferences which has since been renamed as the Patent Trial and Appeal Board.

Case: 15-1533 Document: 1-2 Page: 27 Filed: 04/08/2015 (28 of 91)

Appeal 2014-001006 Reexamination Control 95/001,352 Patent US 7,121,489 B2

filed its Requester's Comments on the Patent Owner Response on November 15, 2012 with a declaration from Mr. Jacobson (hereinafter "Decl. of Jacobson") and exhibits in rebuttal. The Board granted the request to reopen prosecution on January 31, 20013 in the Order Remanding Inter Partes Reexamination Under 37 C.F.R. § 41.77(d).

The Examiner issued a Determination Pursuant to 37 C.F.R. § 41.77(d) on February 15, 2013 (hereinafter "Determination") stating that the Patent Owner has not overcome the New Ground of Rejection of the '7030 Decision and adopting the rejection remanded for reconsideration, thereby determining that all of the claims 1-21 are unpatentable (Determination 9-10). The Patent Owner filed Comments in Response to the Examiner's Determination on March 15, 2013 (hereinafter "PO Comm.") arguing patentability of the claims. The Requester filed Third Party Requester's Comments on the Patent Owner's Response to Examiner's Determination on April 10, 2013 (hereinafter "Req. Comm.") in support of rejecting the claims. The case has been returned to the Board for reconsideration and a New Decision under 37 C.F.R. § 41.77(f).

As discussed *infra*, the Patent Owner's amendments, arguments and submitted evidence are inadequate to establish patentability of claims 1-21. Hence, claims 1-21 remain rejected as follows:

- 1. Claims 1-3, 13-14 and 17-20 stand rejected under 35 U.S.C. § 103 as obvious over Caterpillar in view of Ogawa.
- Claims 4-12, 15, 16 and 21 stand rejected under 35 U.S.C.
   § 103 as obvious over Caterpillar in view of Ogawa and Clark.

Case: 15-1533 Document: 1-2 Page: 28 Filed: 04/08/2015 (29 of 91)

Appeal 2014-001006 Reexamination Control 95/001,352 Patent US 7,121,489 B2

In rejecting claims 1-21, we incorporate by reference the '7030 Decision in its entirety but reproduce and refer to portions thereof *infra*.

#### FINDINGS OF FACT

Findings of Fact 1, 3 and 5 are reproduced herein below for convenience ('7030 Decision 3-5, 14-35).

### The Invention

- FF1. A. The '489 patent is directed to a tool attachment system which allows different tools such as hydraulically actuated metal cutting shears, concrete crushers, and grapples that have movable jaws to be attached to equipment such as backhoes (Abstract; col. 1, 11. 20-26).
  - B. Figure 2 of the '489 patent is reproduced below.

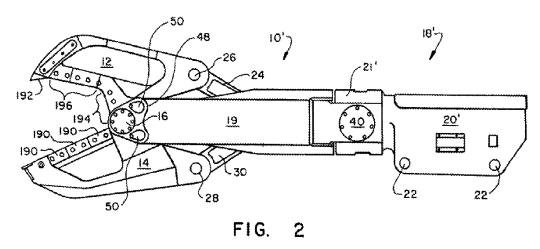


Figure 2 of the '489 patent reproduced above illustrates a side view of a shear 10' including a first blade 12 and a second blade 14 pivotally connected at a main pin 16 to a universal body 18' (col. 3, 11. 55-56; col. 5, 11. 57-59; col. 6, 11. 18-23; Fig. 2).

Case: 15-1533 Document: 1-2 Page: 29 Filed: 04/08/2015

(30 of 91)

Appeal 2014-001006 Reexamination Control 95/001,352 Patent US 7,121,489 B2

C. The specification of the '489 patent states "[a] bridge housing 48 surrounds the main pin 16 and is utilized for quickly and easily attaching the main pin 16 and the associated jaw set to the universal body 18." (Col. 6, 11. 56-59).

D. Figure 57 of the '489 patent is reproduced below.

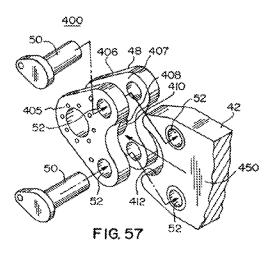


Figure 57 of the '489 patent reproduced above illustrates a perspective view of the quick release system including bridge housing 48 that is positioned against the receiving member 42 and secured thereto by keeper pins 50 which are inserted through the apertures 52 of the bridge housing 48 and the receiving member 42 (col. 5, ll. 46-47; Certificate of Correction dated October 17, 2006, inserting originally filed paragraph [0081]; Fig. 57).

- E. The specification of the '489 patent teaches that the advantage of the claimed invention is that "the outer bearing structure surrounding the main pin 16 will remain affixed even when the tool unit is removed from the universal body 18. This provides the advantage that the bearing or rotating surfaces will be protected from dirt and grit even when the tool unit is disassembled." (Col. 6, 1. 67-col. 7, 1. 5).
  - F. Figures 8 and 9 of the '489 patent are reproduced below.

Case: 15-1533 Document: 1-2 Page: 30 Filed: 04/08/2015 (31 of 91)

Appeal 2014-001006 Reexamination Control 95/001,352 Patent US 7,121,489 B2

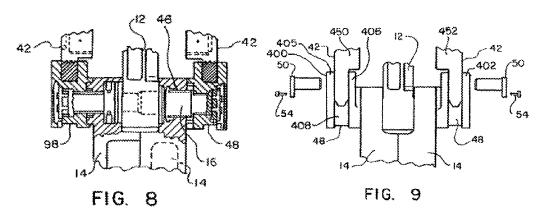


Figure 8 of the '489 patent reproduced above is a partial sectional view of the shear and the components of the bridge housing 48 with the main pin 16 received therein while Figure 9 illustrates the disassembly of the tool unit (col. 4, ll. 1-6; Fig. 8).

G. In discussing the bridge housing 48, the specification of the '489 patent states that "the first end 400 of the bridge housing 48 has a sleeve 408 between the two opposing plates 405, 406," and discloses that the sleeve 408 has a support surface 410 (not shown) (Col. 7, 11. 27-30; see also col. 7, 11. 38-40). Hence, the specification and the illustration of Figure 8 of the '489 patent indicates that the "bridge housing" is an assembly of components.

Ogawa<sup>3</sup>

FF3. A. Ogawa discloses a convertible bucket attachment for excavation and clasping (Abst.). Figure 4a of Ogawa is reproduced below:

<sup>3</sup> U.S. Patent No. 4,283,866 issued August 18, 1981 to Ogawa.

6

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Case: 15-1533 Document: 1-2 Page: 31 Filed: 04/08/2015

(32 of 91)

Appeal 2014-001006 Reexamination Control 95/001,352 Patent US 7,121,489 B2

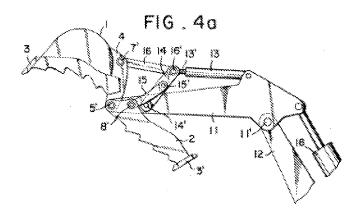
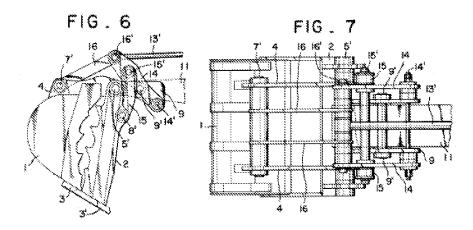


Figure 4a reproduced above shows a side view of the bucket attachment in according to one embodiment including bucket proper 1 and a sub-bucket 2 that are pivotally engaged by pin 5' on arm 11 so that both of the buckets pivot upon actuation of a cylinder actuator 13 (col. 2, 1. 59-col. 3, 1. 10; Fig. 4a).

B. In discussing a prior art bucket apparatus, Ogawa states that "provision of a cylinder actuator between the back and the fore bucket has imposed a substantial limitation on the distance of range in which both bucket members can be operatively moved relative to each other, and prevented the range of angular movement of the members from being as wide as 180° as in the embodiment of the invention." (Col. 1, 1l. 49-55).

C. Figures 6 and 7 of Ogawa are reproduced below:

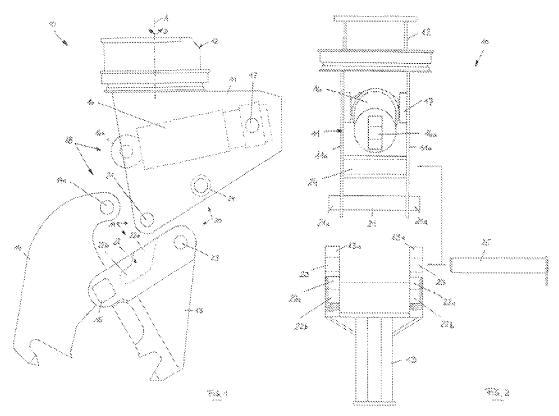


Appeal 2014-001006 Reexamination Control 95/001,352 Patent US 7,121,489 B2

Figure 6 shows a side view while Figure 7 shows a plan view, respectively, of a modified embodiment of a bucket attachment including bucket proper 1 having stay 4, sub-bucket 2, pin 5', sub-link members 14, upper link members 16, and bracket 9 which is used to secure the bucket portion to the arm 11 (col. 3, 1. 62-col. 4, 1. 9). Stay 4 of bucket proper 1 is not attached to bracket 9 (Figs. 6 and 7).

# Caterpillar<sup>4</sup>

FF5. A. Caterpillar discloses a demolition shear such as a scrap metal shear (Pg. 5). Figures 1 and 2 of Caterpillar are reproduced below.



<sup>&</sup>lt;sup>4</sup> German reference DE 297 15 490 U 1 dated August 29, 1997 (hereinafter "Caterpillar"; citations to English translation of record).

8

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Case: 15-1533 Document: 1-2 Page: 33 Filed: 04/08/2015

(34 of 91)

Appeal 2014-001006 Reexamination Control 95/001,352 Patent US 7,121,489 B2

Figure 1 of Caterpillar reproduced above shows a lateral view of a scrap metal shear 10 with its jaws removed (Pg. 5; Fig. 1). Figure 2 of Caterpillar reproduced above shows a frontal, partial cross-sectional view of the scrap metal shear of Figure 1 (Pg. 5; Fig. 2).

- B. Caterpillar discloses that scrap metal shear 10 has a housing 11 to which first jaw 13 and second jaw 14 are attached, the second jaw being pivotably mounted via swivel bearing 15 and operable via a hydraulic cylinder 16 (Pg. 6; Figs. 1 and 2).
- C. Figure 1 of Caterpillar illustrates that when the jaws of the scrap metal shear 10 is removed, the swivel bearing 15 remains pivotably connecting the first jaw 13 and the second jaw 14 together (Fig. 1).
- D. Caterpillar discloses that the first jaw 13 includes a pair of opposing lateral walls 13a having holding fixtures 19 and 20 which are used to attach the first jaw 13 to the housing 11, the holding fixture 19 including grooves 22 with receptacle section 22b in the lateral wall 13a for receiving a pin 21, 21a, and holding fixture 20 including a bore hole 23 in the lateral wall 13a for receiving a locking pin 25 (Pg. 6-7).
- E. Figure 1 of Caterpillar also illustrates that the swivel bearing 15 is mounted via lateral walls 13a (Fig. 1).
- F. Figures 1 and 2 of Caterpillar further illustrates that the lateral walls 13a are distinct structures of the first jaw 13 made as a bracket plate that is attached transversely spaced from the remainder of the first jaw which includes the teeth portion (Figs. 1 and 2).
- G. Caterpillar teaches that the holding fixtures 19 and 20 with grooves 22 and bore hole 23 in the lateral walls 13a allow for disassembly

Case: 15-1533 Document: 1-2 Page: 34 Filed: 04/08/2015 (35 of 91)

Appeal 2014-001006 Reexamination Control 95/001,352 Patent US 7,121,489 B2

"in [a] simple fashion" by merely pulling the locking pin 25 out of the bore holes 23." (Pg. 7).

#### THE '7030 DECISION

In the '7030 Decision, the Board reversed the Examiner's refusal to adopt a proposed rejection of claims 1-3, 13, 14 and 17-20 for being obvious over the combination of Caterpillar and Ogawa (*see generally*, '7030 Decision 28-32). The Board found that Caterpillar

disclose[s] a "bridge housing" as recited by the claims in that the side walls 13a are distinct, discernible structures, and the side walls 13a serves the function of allowing the jaws to "be removed from or attached to the body without the need to disengage or engage the main pivot pin from the blades, thereby providing a quick release system for attaching the tool set to the body" as recited by the claims and described in the Specification of the '489 patent (FF5 A-G). ('7030 Decision 27).

The Board also found that Caterpillar "teaches one of ordinary skill in the art the desirability of simplifying disassembly of jaws, and discloses a mechanism for doing so in the lateral walls 13a having holding fixtures 19 and 20 (FF5 A, D-G)." ('7030 Decision 29; FF5 A, D-G). The Board further found that Ogawa establishes that providing two movable blades are known, and that Ogawa "also specifically discloses the provision of wide range of angular movement (FF3 A)." ('7030 Decision 30; FF3 A).

Based on the above findings, the Board concluded that the Requester has articulated a rational reason for modifying Caterpillar, that is, to make the blade 13 pivotable about the existing pivot pin 15 so as to allow the blades to be opened wider ('7030 Decision 30). The Board further

Case: 15-1533 Document: 1-2 Page: 35 Filed: 04/08/2015 (36 of 91)

Appeal 2014-001006 Reexamination Control 95/001,352 Patent US 7,121,489 B2

articulated that pivotable mounting of the first blade 13 in Caterpillar would "allow for minimizing movement of the object grasped since the object would be grasped on opposing sides thereof by moveable blades rather than a single moving blade which applies grasping force from only one side until the object abuts the non-movable blade." (*Id.*). The Board concluded that:

[I]t would have been obvious to one of ordinary skill in the art to apply the teaching of Ogawa with respect to articulation of both grasping members and wide range of angular movement to thereby modify Caterpillar so that the first jaw 13 with the teeth thereon also pivots about the swivel bearing 15 like second jaw 14, while also maintaining the simplified mounting and disassembly via the lateral walls 13a with their holding fixtures 19, 20 so that the jaws can be disassembled in a simple manner as specifically taught therein (FF5 D). In our view, it would be apparent and within the skill of one of ordinary skill in the art that such modification to the device of Caterpillar may be attained, and within his/her skill to, for example, provide another mounting structure like the lateral walls 13a, or alternatively, making the teeth portion of the first jaw 13 to be separately mounted to the swivel bearing 15, as taught by Ogawa. While the above suggested modification to Caterpillar would entail design and structural changes, we observe that it is not necessary that the inventions of the references must be physically combinable, without change, to render obvious the invention under review. In re Sneed, 710 F.2d 1544, 1550 (Fed. Cir. 1983); see also In re Keller, 642 F.2d 413, 425 (CCPA 1981)."

('7030 Decision 30-31).

#### **AMENDED CLAIMS**

Representative independent claim 1, as amended after the '7030 Decision, reads as follows (Resp. to Decision 3):

Case: 15-1533 Document: 1-2 Page: 36 Filed: 04/08/2015 (37 of 91)

Appeal 2014-001006 Reexamination Control 95/001,352 Patent US 7,121,489 B2

1. (Twice Amended) A tool set for coupling to the receiving member of a body having hydraulically powered blades, the tool set comprising:

a pair of movable blades pivoted together about a main pivot pin;

a bridge housing [engaging]encasing the main pivot pin, wherein the bridge housing is separate from the movable blades;

wherein the blades are movable relative to the bridge housing;

wherein the bridge housing with the main pivot pin intact therein is adapted to be detachably connected to the receiving member and the pair of movable blades is adapted to be detachably connected to at least one hydraulic cylinder such that the tool set may be removed from or attached to the body without the need to disengage or engage the main pivot pin from the blades, thereby providing a quick release system for attaching the tool set to the body; and

wherein the bridge housing has an aperture adapted to be mated with a matching aperture of the receiving member through a removable keeper pin to secure the bridge housing to the receiving member.

Independent claims 7 and 17-19 have also been amended to recite that the bridge housing is separate from the movable blades, but independent claims 20 and 21 were not amended (Resp. to Decision 3-9).

#### **ANALYSIS**

The Examiner states that the Patent Owner has failed to overcome the New Ground of Rejection as articulated by the Board in the '7030 Decision (Determination 9). The Patent Owner disagrees for various reasons (PO Comm. 2) which we address *infra*.

Case: 15-1533 Document: 1-2 Page: 37 Filed: 04/08/2015

(38 of 91)

Appeal 2014-001006 Reexamination Control 95/001,352 Patent US 7,121,489 B2

#### Articulated Reason

The Patent Owner argues that the Board failed to articulate a reason with rational underpinnings to support the obviousness conclusion and, thus, engaged in impermissible hindsight (PO Comm. 2). The Patent Owner asserts that there is no apparent reason to modify Caterpillar because there is nothing in the record which establishes that Caterpillar was inadequate for any intended purpose and there is no evidence establishing "demands known to the design community or present in the marketplace." (PO Comm. 4) (quoting KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398 (2007)).

Obviousness analysis requires a determination that "there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue" which is substantiated by an articulated reasoning with rational underpinnings. KSR, 550 U.S. at 418. The bridge housing of the '489 patent allows the tool to be removed or attached without disengaging or engaging the main pivot pin, thereby protecting the rotating surfaces from dirt and grit when the tool is removed (FF5 C, E). However, providing a bridge housing is not new and is disclosed by Caterpillar, which also specifically teaches that the described device allows for disassembly "in [a] simple fashion' by merely pulling the locking pin 25 out of the bore holes 23." (FF5 A-G). The record also establishes that it is well known in the art to provide tools with jaws wherein only one of the jaws is movable and the other is fixed (see, e.g., '7030 Decision, FF2 E; FF5 A) or wherein both of the jaws are movable (see, e.g., FF3 A; '7030 Decision, FF4 A). Hence, the Board concluded that "it would have been obvious to . . . apply the teachings of Ogawa with respect to articulation of both grasping members and wide

Appeal 2014-001006 Reexamination Control 95/001,352 Patent US 7,121,489 B2

range of angular movement to thereby modify Caterpillar" to allow the blades to be opened wider or to minimize movement of the object as it is grasped ('7030 Decision 30). Correspondingly, contrary to the assertion of the Patent Owner, reasons with rational underpinnings have been articulated.

The Patent Owner's arguments based on the assertion that there is lack of evidence regarding "demands" to modify the device of Caterpillar or regarding deficiencies in the same are also unpersuasive. As noted, the prior art itself clearly demonstrates that there exists a market for tools in which both of the jaws are movable (see, e.g., FF3 A; '7030 Decision, FF4 A). In this regard, the Requester has submitted further evidence in Rafn '242,<sup>5</sup> LaBounty '493, <sup>6</sup> and LaBounty '569<sup>7</sup> as rebuttal to the Patent Owner's assertions which "clearly support the conclusion that for some applications within this art, it is desirable to make both blades movable." (Req. Comm. 6; Decl. of Jacobson ¶¶ 9-11). In addition to the desirability of allowing disassembly in a simple fashion (FF5 A), the evidence of record further suggests the advantage and desirability of allowing for wide openings (FF3 B). Thus, the evidence suggests to one of ordinary skill familiar with all of the pertinent prior art to combine these references to attain the suggested benefits therein, regardless of the absence of explicit disclosure of any deficiency in the Caterpillar device. See KSR, 550 U.S. at 417 ("[I]f a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is

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<sup>&</sup>lt;sup>5</sup> U.S. Patent No. 5,474,242 issued December 12, 1995 to Rafn.

<sup>&</sup>lt;sup>6</sup> U.S. Patent No. 4,838,493 issued June 13, 1989 to LaBounty.

<sup>&</sup>lt;sup>7</sup> U.S. Patent No. 5,044,569 issued September 3, 1991 to LaBounty.

Case: 15-1533 Document: 1-2 Page: 39 Filed: 04/08/2015

(40 of 91)

Appeal 2014-001006 Reexamination Control 95/001,352 Patent US 7,121,489 B2

beyond his or her skill."); see also Custom Accessories, Inc. v. Jeffrey-Allan Industries, Inc., 807 F.2d 955, 962 (Fed. Cir. 1986) ("The person of ordinary skill is a hypothetical person who is presumed to be aware of all the pertinent prior art."); In re Antle, 444 F.2d 1168, 1171-72 (CCPA 1971). Correspondingly, we disagree with the Patent Owner that there is an evidentiary deficiency in the record.

The Patent Owner also argues that to achieve wider opening, Ogawa utilizes a complex linkage arrangement and application to the device of Caterpillar that requires "modification of the housing 11... to make room for the links," and "add[s] complexity and a potential source of weakness, diminishing the original rugged design." (PO Comm. 4-5). Firstly, we observe that the Patent Owner does not present persuasive evidence to establish that the level of complexity is so high that it would be beyond the skill of a person of ordinary skill in the art to modify Caterpillar accordingly. To the contrary, the prior art of record demonstrates that the skill level in the art is high. See Okajima v. Bourdeau, 261 F.3d 1350, 1355 (Fed. Cir. 2001); Union Carbide Corp. v. American Can Co., 724 F.2d 1567, 1573 (Fed. Cir. 1984). In this regard, we further note that LaBounty '493 submitted by the Requester in rebuttal to the Patent Owner's assertions discloses that "in some instances, the brace 27 may be replaced by an extensible connection 27.1 illustrated in phantom lines in Figure 6 and may be in the form of a hydraulic cylinder so that the orientation of the lower jaw 17 may be adjustable." (LaBounty '493, col. 3, 11. 23-27; Fig. 6; see also Req. Comm. 5; Decl. of Jacobson ¶ 10). Thus, the prior art of record generally, and LaBounty '493 specifically, demonstrates not only the high level of skill of

Case: 15-1533 Document: 1-2 Page: 40 Filed: 04/08/2015 (41 of 91)

Appeal 2014-001006 Reexamination Control 95/001,352 Patent US 7,121,489 B2

one of ordinary skill in the art as to the ability to alter jaws but also demonstrates that implementing a jaw so that one or both blades are movable is a design choice that is well within the skill of one of ordinary skill.

Furthermore, even if the Patent Owner's assertion that addition of links introduces disadvantages because it would add complexity and potential source of weakness is true, such disadvantages does not necessarily render such combination improper. See Medichem, S.A. v. Rolabo, S.L., 437 F.3d 1157, 1165 (Fed. Cir. 2006) ("a given course of action often has simultaneous advantages and disadvantages, and this does not necessarily obviate motivation to combine."); see also Winner Int'l Royalty Corp. v. Wang, 202 F.3d 1340, 1349 n. 8 (Fed. Cir. 2000) ("The fact that the motivating benefit comes at the expense of another benefit, however, should not nullify its use as a basis to modify the disclosure of one reference with the teachings of another. Instead, the benefits, both lost and gained, should be weighed against one another."). In our view, one of ordinary skill in the art would take such factors into consideration and conclude that for certain applications, the benefits of allowing for wide opening and minimizing movement of the grasped object would outweigh the potential disadvantages asserted by the Patent Owner. The Patent Owner has not provided persuasive evidence or arguments to the contrary.

The Patent Owner also argues that the benefit of minimizing movement of the object as articulated in the '7030 Decision as another reason for combining the references already exists in Caterpillar without further modification (PO Comm. 5). According to the Patent Owner,

Case: 15-1533 Document: 1-2 Page: 41 Filed: 04/08/2015 (42 of 91)

Appeal 2014-001006 Reexamination Control 95/001,352 Patent US 7,121,489 B2

because the device of Caterpillar includes "a rotatable connection head 12 that may be rotated about an axis A" which is connected to an articulating hydraulic excavator, there is no need for dual movable jaws. (PO Comm. 5).

The Patent Owner misapprehends the reason as articulated by the Board which was that the movable blades "allow for minimizing movement of the object grasped since the object would be grasped on opposing sides thereof by moveable blades rather than a single moving blade which applies grasping force from only one side until the object abuts the non-movable blade." ('7030 Decision 30). Thus, the advantage of the movable blades stems from being able to grasp the object positioned in the opening between the two blades by progressively reducing the opening through the simultaneous movement of the two blades. If only one of the blades is movable, the movable blade must displace the object until it abuts against the non-movable blade in order to grasp the object. Whereas such movement of the object may be reduced by first abutting the non-movable blade against the object prior to moving the movable blade, and such positioning may be facilitated by the articulating arm, such positioning may not be attainable or desirable in all circumstances. The rotatable connection head of Caterpillar, while allowing for angular positioning of the blades, does not directly address the aspect of the positioning discussed above.

The Patent Owner further argues that the reason articulated by the Requester for the desirability of the combination, that is, to allow exertion of a greater force, "appears to be impossible" in view of the fact that Ogawa's device has various intermediate linkages (PO Comm. 5-6). However, this rationale was proffered by the Requester, not by the Board. The Board did

Case: 15-1533 Document: 1-2 Page: 42 Filed: 04/08/2015 (43 of 91)

Appeal 2014-001006 Reexamination Control 95/001,352 Patent US 7,121,489 B2

not adopt this rationale in entering the rejection. Hence, this argument of the Patent Owner is moot.

The Patent Owner notes that it has "submitted Attachments E-G showing a number of speculative combinations, including View 2(A), none of which was believed to be obvious or operative." (PO Comm. 6; Second Decl. of Ramun, Attachments E-G). According to the Patent Owner, the Requester's Modified View 2(A) is deficient to attain the benefits articulated as the basis for the combination (PO Comm. 7). However, we observe that Modified View 2(A) was submitted by the Requester (Decl. of Jacobson ¶14) in response to the numerous attachments in the Second Declaration of Ramun, and the Board did not rely on the Modified View 2(A) in its entry of the New Ground of Rejection.

To any extent that the various views set forth in the Declaration of Ramun (and in the Declaration of Jacobson) may be pertinent, as conceded by the Patent Owner, the various combinations are merely speculative. We also observe that the Patent Owner's arguments are based on bodily incorporating the teachings of Ogawa into the device of Caterpillar (*see generally*, Second Decl. of Ramun ¶ 13-31). In this regard, asserting inoperability, the Patent Owner attacks Requester's Modified View 2(A) as if it is an actual implementation of the combination based on engineering drawings that are sized to scale (*see* PO Comm. 6-7). However, such bodily incorporation using drawings of a patent is not the proper inquiry. *See In re Nievelt*, 482 F.2d 965, 968 (CCPA 1973) ("Combining the *teachings* of references does not involve an ability to combine their specific structures."); *EWP Corp. v. Reliance Universal Inc.*, 755 F.2d 898, 907 (Fed. Cir. 1985)

Appeal 2014-001006 Reexamination Control 95/001,352 Patent US 7,121,489 B2

("A reference must be considered for everything it *teaches* by way of technology and is not limited to the particular *invention* it is describing and attempting to protect. On the issue of obviousness, the combined teachings of the prior art as a whole must be considered."); *see also In re Heck*, 699 F.2d 1331, 1332-33 (Fed. Cir. 1983).

Rather, the proper analysis in determining patentability is whether it would have been obvious to one of ordinary skill in the art to combine the references for the reason articulated and whether the reason has sound rational underpinnings. *KSR*, 550 U.S. at 418; *In re Keller*, 642 F.2d 413, 425 (CCPA 1981) ("[T]he test [for obviousness] is what the combined teachings of the references would have suggested to those of ordinary skill in the art."). As noted, the Patent Owner does not present persuasive evidence or arguments to establish that implementing the suggested combination in an operable manner would be beyond the skill of a person of ordinary skill in the art which is demonstrably high. *See Okajima*, 261 F.3d at 1355; *Union Carbide*, 724 F.2d at 1573.

## Ogawa Teaches Away

The Patent Owner argues that Ogawa teaches away from the modifications shown in Modified View 2(A) to the device of Caterpillar because it discloses that an object is to use a single cylinder and discusses the need for two separate cylinders in the prior art (PO Comm. 2, 9). However, this line of argument is not persuasive because as discussed *supra*, Modified View 2(A) with its inclusion of two hydraulic cylinders is not the basis of the '7030 Decision. In entering the obviousness rejection based on

Case: 15-1533 Document: 1-2 Page: 44 Filed: 04/08/2015 (45 of 91)

Appeal 2014-001006 Reexamination Control 95/001,352 Patent US 7,121,489 B2

the combination of Caterpillar and Ogawa, the Board considered not only the particular invention described, but what these references teach by way of technology. *EWP*, 755 F.2d at 907. In this regard, we also note that claims of the '489 patent actually recite "at least one hydraulic cylinder" except for dependent claim 13 which recites "a single hydraulic cylinder." Claim 13 was also rejected as obvious because this feature is clearly disclosed in Caterpillar and Ogawa ('7030 Decision 32). Thus, the conclusion of the '7030 Decision is that the claims of the '489 patent are obvious whether only a single cylinder is used or two cylinders are used. The Patent Owner's additional inoperability arguments based on the Requester's Modified View 2(A) (PO Comm. 9) are unpersuasive for the reasons discussed *supra*.

#### Reconstruction

The Patent Owner argues that the suggested modification to Caterpillar is a complete reconstruction that does not function (PO Comm.

- 2). The Patent Owner argues that the following modifications are required to the Caterpillar device:
  - 1. separate the side walls 13a from the jaw 13;
  - 2. provide a new pivot hole for the separated jaw 13;
  - 3. add a second hydraulic cylinder;
  - 4. provide a hole in the separated jaw 13 for the hydraulic cylinder;
  - 5. provide a connecting arm for the hole of the separated jaw 13; and
- 6. provide a mount for the second hydraulic cylinder. (PO Comm. 10).

Case: 15-1533 Document: 1-2 Page: 45 Filed: 04/08/2015 (46 of 91)

Appeal 2014-001006 Reexamination Control 95/001,352 Patent US 7,121,489 B2

However, as reproduced *supra*, "[w]hile the . . . suggested modification to Caterpillar would entail design and structural changes, we observe that it is not necessary that the inventions of the references must be physically combinable, without change, to render obvious the invention under review. *In re Sneed*, 710 F.2d 1544, 1550 (Fed. Cir. 1983); *see also In re Keller*, 642 F.2d 413, 425 (CCPA 1981)." ('7030 Decision 31). The modifications identified by the Requester appear to be routine and well within the skill of one of ordinary skill in the art, which is demonstrably high. The Patent Owner does not present persuasive evidence to establish that the identified modifications or implementing the suggested combination in an operable manner via alternative modifications would be beyond the skill of a person of ordinary skill in the art. The Patent Owner's additional inoperability arguments based on the Requester's Modified View 2(A) (PO Comm. 11-12) are unpersuasive for the reasons discussed *supra*.

## Declaration of Jacobson

The Patent Owner argues that the Declaration of Jacobson is contrary to the prior actions of the Requester and should be discounted (PO Comm. 3). The Patent Owner notes that Mr. Jacobson was a Director of Engineering at Genesis (i.e., the Requester) and the inventor of U.S. Patent No. 7,284,718 which states "[t]here is a need for a heavy duty demolition shear with interchangeable jaw assemblies that can be easily mounted an[d] demounted to the apparatus." (PO Comm. 14, *quoting* '718 patent, col. 1, ll. 65-67). Hence, the Patent Owner asserts that the Requester has admitted existence of a "long-felt need." (PO Comm. 16). The Requester also asserts

Case: 15-1533 Document: 1-2 Page: 46 Filed: 04/08/2015 (47 of 91)

Appeal 2014-001006 Reexamination Control 95/001,352 Patent US 7,121,489 B2

that because Genesis failed to arrive at a design similar to that disclosed in the '489 patent until year 2005, this indicates that the claims of the '489 patent are not obvious and it is contradictory for Mr. Jacobson to assert obviousness when such design eluded Mr. Jacobson until year 2005 even though he had extensive experience in the industry (PO Comm. 14-15).

Firstly, we note that Jacobson Declaration is not dispositive as to our conclusion of obviousness with respect to the claims of the '489 patent. Secondly, while it may be argued that the identified statement in U.S. Patent No. 7,284,718 is evidence of non-obviousness, it is merely one piece of evidence that must be considered with all of the evidence of record which has been discussed *supra*. In addition, long-felt need requires showing the existence of a persistent problem recognized by those of ordinary skill in the art for which a solution was not known. In re Gershon, 372 F.2d 535, 539 (CCPA 1967). As noted, the solution to the problem addressed by the '489 patent was already known in the art (FF5 A). Moreover, while providing for such a feature may not have been obvious to Mr. Jacobson at the time the application for U.S. Patent No. 7,284,718 was filed, the issue is whether it would have been obvious to a person of ordinary skill in the art who would have been aware of all of the pertinent prior art, including those in the present record. See Custom Accessories, 807 F.2d at 962 ("The person of ordinary skill is a hypothetical person who is presumed to be aware of all the pertinent prior art. The actual inventor's skill is not determinative.").

The Patent Owner further argues that Genesis (i.e., the Requester) was found liable to the Patent Owner for trade secret misappropriation in a court action and that the "misappropriated trade secrets used by Genesis to design

Case: 15-1533 Document: 1-2 Page: 47 Filed: 04/08/2015 (48 of 91)

Appeal 2014-001006 Reexamination Control 95/001,352 Patent US 7,121,489 B2

their jaw set were some of the design details used for the internal elements of the jaw set that is the subject of the present reexamination proceeding." (PO Comm. 15). However, the Patent Owner does not provide adequate details as to the nexus between the misappropriated trade secrets and the claimed invention of the '489 patent which would allow us to evaluate the pertinence of the trade secret misappropriation, if any.

#### Amendments to the Claims

The Patent Owner asserts that because independent claims 1, 7 and 17-19 have been amended as suggested by the Board to clearly distinguish over the prior art of record, the rejections have been overcome (PO Comm. 3, 16-17, *citing* '7030 Decision 27-28). The Patent Owner misapprehends the record. The '7030 Decision states:

While the side walls 13a are attached to the remaining structure of the first jaw 13, we do not consider the claims to require physical independence or separation. To the extent that physical independence or separation from a jaw was the intended meaning of the limitation, the Patent Owner has had an adequate opportunity to amend the claims accordingly. ('7030 Decision 27-28).

The above excerpt addresses the *anticipation* rejection of claims 20 and 21, this anticipation rejection being reversed because Caterpillar does not disclose "a pair of movable blades pivoted together about a main pivot pin." (*Id.* at 28; *see also* Req. Comm. 17-18). Whereas such amended language may have overcome the anticipation rejection because the side walls 13a of Caterpillar are attached to the first jaw 13, the amended language does not overcome the obviousness rejection based on the

Case: 15-1533 Document: 1-2 Page: 48 Filed: 04/08/2015 (49 of 91)

Appeal 2014-001006 Reexamination Control 95/001,352 Patent US 7,121,489 B2

combination of Caterpillar and Ogawa (*id.* at 28-32). As explained by the Examiner, "in modifying Caterpillar in view of Ogawa, the BPAI has determined that the resulting combination would include a modified first jaw 13 that is 'separate from' the lateral walls 13a (which constitute the claimed 'bridge housing')." (Determination 9).

### Claims 4-12, 15-16 and 21

These claims require "removable keeper pins to secure the bridge housing to the receiving member." (See, e.g., claim 4). The Examiner determined that these claims are unpatentable over the combination of Caterpillar in view of Ogawa and Clark and adopted the rejection remanded for reconsideration (Determination 10). The Examiner agrees with the Requester's finding that Clark discloses a pair of remote-controlled retractable pins that engage apertures to securely engage a bucket to a receiving member and concluding that these claims would have been obvious to a person of ordinary skill based on Clark's express teaching that its retractable pin system is an improvement over manually inserted pins (Determination 7-8, 10; see also Clark, col. 2, 1. 63-col. 3, 1. 9).

In addition to relying on the unpersuasive arguments addressed *supra* (PO Comm. 18), the Patent Owner argues that "the pin arrangement disclosed in Clark is directed to a terminal piece of equipment, such as, for example, the bucket 4 illustrated in Figs. 1-3," which is "fundamentally different from the subject invention" that uses pins to secure a separate and distinct bridge housing (PO Comm. 17-18).

Case: 15-1533 Document: 1-2 Page: 49 Filed: 04/08/2015

(50 of 91)

Appeal 2014-001006 Reexamination Control 95/001,352 Patent US 7,121,489 B2

We find no merit in the Patent Owner's argument. The primary reference Caterpillar discloses the use of a locking pin to secure a bridge housing (FF5 D). Clark is being relied upon for the use of multiple, retractable pins in the art for securement of removable components. It would have been obvious to one of ordinary skill in the art to use the pins of Clark for the reasons suggested therein to secure the demolition tool resulting from the combination of Caterpillar and Ogawa where the bridge housing is separate from the blades as discussed *supra*. These claims are directed to a predictable variation wherein one element is substituted for another known in the art. *KSR*, 550 U.S. at 417; *see also id.* at 416 ("when a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result.")

## NEW DECISION UNDER 37 C.F.R. § 41.77(f):

- 1. Claims 1-3, 13-14 and 17-20 stand rejected under 35 U.S.C. § 103 as obvious over Caterpillar in view of Ogawa.
- Claims 4-12, 15, 16 and 21 stand rejected under 35 U.S.C.§ 103 as obvious over Caterpillar in view of Ogawa and Clark.

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Case: 15-1533 Document: 1-2 Page: 50 Filed: 04/08/2015 (51 of 91)

Appeal 2014-001006 Reexamination Control 95/001,352 Patent US 7,121,489 B2

cc:

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