

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DAVID S. LARSON

Appeal 2008-0781
Application 10/702,937
Technology Center 3600

Decided: September 26, 2008

Before LINDA E. HORNER, JOSEPH A. FISCHETTI, and JOHN C.
KERINS, *Administrative Patent Judges*.

FISCHETTI, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant seeks our review under 35 U.S.C. § 134 of the Examiner's non-final rejection of claims 1-10. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

SUMMARY OF DECISION

We AFFIRM-IN-PART.

THE INVENTION

Appellant claims a ripper attachment coupled to excavation machinery for breaking up material being handled thereby. (Specification 1:10-12.)

Claims 1 and 5, reproduced below, are representative of the subject matter on appeal.

Claim 1: A ripper attachment for an excavation device comprising:

a pair of spaced-apart plate members configured for attachment to said excavation device, each of said plate members having a first interface section, a second interface section, and a third interface section;

a body having a ripper tip disposed on a distal end, and having first and second mounting sections disposed on a proximal end, said first mounting section being attached to said first interface section of said each of said plate members and said second mounting section being attached to said second interface section of said each of said plate members to form a continuously fixed non-pivotal connection between said plate members and said body; and

a brace element interposed between said plate members and coupled to said third interface section of said each of said plate members.

Claim 5: An excavation device comprising:
a tool;
a boom;
a tool coupler for securing said tool to
said boom; and
a ripper attachment, said ripper
attachment including:
a pair of spaced-apart plate members
coupled to said tool coupler, each of said plate
members having a first interface section, a second
interface section, and a third interface section;
a body having a ripper tip disposed on a
distal end, and having first and second mounting
sections disposed on a proximal end, said first
mounting section being attached to said first
interface section of said each of said plate
members, and said second mounting section being
attached to said second interface section of said
each of said plate members to form a continuously
fixed non- pivotal connection between said plate
members and said body to retain said body in a
position away from said tool; and
a brace element interposed between said
plate members and coupled to said third interface
section of said each of said plate members.

THE REJECTION

The Examiner relies upon the following as evidence of
unpatentability:

Cairns	US 3,702,712	Nov. 14, 1972
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The following rejection is before us for review.

1. Claims 1-10 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Cairns.

ISSUE

The anticipation issue before us is whether Appellant has shown that the Examiner erred in rejecting claims 1-10 under 35 U.S.C. § 102(b) as anticipated by Cairns. This anticipation issue turns on whether Cairns expressly or inherently discloses a continuously fixed non-pivotal connection between plate members and the body of the ripper as recited in claim 1, and further with respect to claim 5, whether the continuously fixed non-pivotal connection condition locates the body of the ripper away from the tool of the excavation device.

FINDINGS OF FACT

We find the following facts by a preponderance of the evidence:

1. The Examiner found:

[r]egarding claim 1, Cairns discloses a ripper attachment comprising:

- a pair of spaced-apart plate member, seen as brackets (2, 3) in Fig. 1, configured for attachment to the excavation device (see Fig. 2), each of the plate members having a first interface section, a second interface section, and a third interface section,
- a body, seen as ripper tooth (16) in Fig. 1, having a tip disposed on a distal end, and having a first and second mounting sections disposed on a proximal end, the first mounting section (seen as the area through which pin 29 seen in Figs. 1 and 4 travels through tooth 16) attachable to the first interface section of said each of the plate members (seen as the area at which the pin 29 joins with

brackets 2 and 3), the second mounting section (seen as the location through which pin 15 travels in the tooth 16) attached to the second interface section of said each of the plate members (seen as the area around 11 and 12 in Fig. 1) to form a continuously fixed non-pivotal connection between the plate members and the body (since the connection will be continuously fixed and non-pivotal during the entire duration that both pins 15, 29 are securing the tooth 16 in the position seen in Fig. 4).

- a brace element, seen as pin (8), interposed between the plate members and coupled to the third interface area of each of the plate members.

(Answer 3-4.)

2. The Examiner found with respect to claim 6 that

the tool coupler of Cairns includes a pair of vertical plates, seen as arms (9, 10), each of the brackets (2, 3) in fixed attachment along an upper edge of each of the arms (9, 10) (seen in Figs. 1, 3, 4 as the fixed connection between the lower end of arm 10 and the brackets 2, 3 through the use of pin 15).

(Answer 6.)

3. Cairns discloses that in one mode of operation as illustrated

[i]n the enlarged view of **FIG. 4** the backhoe bucket **1** is shown with its forward edge **28** about to dig into the ground **27** and the ripper tooth **16** in its inactive position against the back of the backhoe bucket. If desired it may be retained in this position by pin **29** passing through a hole in the ripper tooth and through holes in the backhoe bucket brackets **2** and **3**, which holes may be alternate holes provided in said brackets for attaching the lower end of actuating arm **10**, said

holes commonly being provided in said brackets to permit a different range of movement of the backhoe bucket during digging operations.

(Cairns, col. 2, ll. 40-51.)

4. The Specification describes that the

pins 86, 88, and 92 are field-removable and field-installable for attaching body 54 to first supports 72, welded to coupling apparatus 30, as needed and for ready removal of body 54 for repair or replacement.

(Specification 8:17-21.)

5. The Specification describes that the

ripper attachment 22 is retrofit onto an existing tool coupler 28 by welding first and second support members 50 and 52, respectively, to vertical plates 48 of coupling apparatus 30. However, in an alternative embodiment, first and second support members 50 and 52 may be formed integral to vertical plates 48 when tool coupler 28 is manufactured. As such, tool coupler 28 and ripper attachment 22 may be provided as a single system to operators of excavation equipment.

(Specification 7:13-21.)

6. In Cairns, the pin 15 connects only the lower arm 10 of the actuating arms 9 and 10 to the plate members 2 and 3 (Cairns, col. 2, ll.9-13), and the upper arm 10 is connected in series to the upper end of the lower arm 9 as shown in Figure 1.

PRINCIPLES OF LAW

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987), *cert. denied*, 484 U.S. 827 (1987).

ANALYSIS

We affirm the rejection of claims 1-5 and 7-10 under 35 U.S.C. § 102(b) and reverse the rejection of claim 6 under the same grounds.

Rather than repeat the arguments of Appellant or the Examiner, we make reference to the Briefs and the Answer for their respective details. Only those arguments actually made by Appellant have been considered in this opinion. Arguments which Appellant could have made but chose not to make in the Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii) (2007).

Initially, we note that Appellant argues claims 1 and 9 together as a group. Correspondingly, we select representative claim 1 to decide the appeal of these claims, remaining claim 9 stands or falls with claim 1.

Appellant does not provide a substantive argument as to the separate patentability of claims 2-4, 8, and 10 that depend from claims 1 and 9, which are the sole independent claims among those claims. Therefore, claims 2-4, 8, and 10 stand or fall with claims 1 and 9. *See*, 37 C.F.R. § 41.37(c)(1)(vii) (2007).

The Examiner found that Cairns discloses all the claim elements recited in each of independent claims 1, 5 and 9 (FF 1). Appellant’s only challenge to these findings in Cairns as they relate to claims 1 and 9 is that

Cairns fails to teach the claim limitation of a continuously fixed non-pivotal connection between the plate members and the body notwithstanding Office Action allegations to the contrary. Cairns fails to teach of a continuously fixed non-pivotal connection because the Cairns device occasionally has a pivotal connection.

(Appeal Br. 13.) However, the Examiner found, and we agree, that Cairns discloses a continuously fixed non-pivotal connection between the plate members and the ripper body "...since the connection will be continuously fixed and non-pivotal during the entire duration that both pins 15, 29 are securing the tooth 16 in the position seen in Fig. 4 ..." (FF 1). Appellant even concedes this point stating "Cairns does teach of an occasionally non-pivotal connection, as shown in FIG. 4. The occasionally non-pivotal connection of the Cairns device is assumed when the ripper tooth is connected to the brackets 2 and 3 via both pin 29 and pin 15...." (Appeal Br. 14.) Thus, the issue is not one of whether a non-pivotal connection exists in Cairns, but rather the issue revolves around the duration of such a connection.

Appellant first attempts to distinguish Cairns from claims 1 and 9 by presenting dictionary definitions for the terms "continuously," "fixed," "pivotal," and "connection" to arrive at his interpretation of the phrase as "... a state of being connected that is securely placed or fastened, is uninterrupted in space, time, or sequence, and does not pivot." (Appeal Br. 14-15.) However, we do not see how this interpretation distinguishes the claims from Cairns in the mode shown in Figure 4 where the ripper 16 is non-pivotally fixed to the bucket 1 by the additional pin 29 (FF 3). That is, when the ripper 16 in Cairns is so fixed in place by the two pins 15 and 29, it

cannot pivot and is fixed or secured in place by these pins for the duration that it is so connected (FF 3). Thus, in this condition, the ripper 16 is uninterruptedly non-pivotally connected to the brackets 2 and 3 by the two-pin connection as required by the claims.

Further, the Specification describes, and claim 9 even recites, that pins 86 and 92 which fix the ripper body to the supports 72 are field removable and field installable (FF 4). Thus, based on this description, we interpret Appellant's definition of "continuously fixed" to mean that it is not a permanent connection, but rather one like that disclosed by Cairns, which can be disconnected from a non-pivotable condition as required by need.

Appellant also argues that using the terms "continuously fixed non-pivotal connection" avoids ambiguity associated with language distinguishing working and non-working positions of the tool and that "[t]he comprehensive limitation of claim 1 includes both a working position and a non-working position, or any other position that may be imagined" (Appeal Br. 15-16). Appellant's argument however is based on speculation and not on limitations presently appearing in the claims, and thus is not commensurate with the scope of claims 1, 5, and 9. *In re Self*, 671 F.2d 1344, 1348 (CCPA 1982).

Appellant next argues that "...one might conjecture that the Cairns ripper tooth is non-pivotal when the ripper tooth is currently digging in hardened ground and the force of the ground against the ripper tip forces the Cairns ripper tip to pivot fully backward until it can no longer pivot" (Appeal Br. 17-18), and hence is fixed non-pivotally in this condition. However, we do not see the relevance of this argument because the Examiner has found that the requirements of the claims are already met by

the mode of operation shown in Figure 4 of Cairns where the ripper tooth 16 is secured in place by both pins 15 and 29 as discussed *supra* (FF 4).

Appellants further argue that “[i]f the Cairn ripper tooth was modified so that it was made continuously fixed and non-pivotal, the ripper tooth would be rendered unworkable for its intended purpose of moving under the action of gravity to assume its optimal operating position.” (Appeal Br. 19.) Again this argument is not relevant to the issues on appeal because all claims stand rejected under 35 U.S.C. § 102(b) and not under 35 U.S.C. § 103(a), making any notion of modification irrelevant.

Claim 5 includes the additional limitation of the continuously fixed non- pivotal connection between said plate members and said body to retain said body in a position away from the tool. The Examiner considered the forward edge 28 of the bucket 1 in Cairns to be the tool, and that in the condition illustrated in Figure 4, the ripper 16 is positioned away from the tool 28. (Answer 5-6.) Appellant however argues that in Cairns the tool should be considered as the backhoe bucket in its entirety, inclusive of the front edge 28. (Appeal Br. 22.) However, we are not persuaded by Appellant’s argument. We read the working end 28 of the bucket as the tool, because the end 28 and not the basket of the bucket bites into the broken up pavement or topsoil and does the work. Thus, the Appellant has not shown error in the Examiner’s rejection of claim 5. Appellant does not provide a substantive argument as to the separate patentability of claim 7 which depends from claim 5. Therefore, claim 7 falls with claim 5. *See*, 37 C.F.R. § 41.37(c)(1)(vii) (2007).

Appellant argues claim 6 separately. Claim 6 recites in pertinent part, a main body of said tool coupler including a pair of vertical plates and said

each of said plate members is in fixed attachment along an upper edge of each of said pair of vertical plates.

It is the Examiner's position that the actuating arms 9 and 10 in Cairns constitute the pair of vertical plates, and the plate members or brackets 2, 3 are in fixed attachment along an upper edge of the arms 9, 10 by virtue of the pin connection 15 connecting the lower end of arm 10 and the brackets 2, 3 (FF 3). We do not agree with the Examiner's interpretation here of Cairns because the pin 15 connects only the lower arm 10 to the plate members 2 and 3. The upper arm 9 instead is connected in series to the lower arm 10 at its lower end and thus is not connected to a plate member along an upper edge (FF 6) as required by the claims. Furthermore, the Specification describes the fixed connection between the vertical plate members and the first and second support members (claimed as plate member) as a weld connection, or as formed integrally when tool coupler 28 is manufactured (FF 5). Thus, one having ordinary skill in the art would understand the claimed fixed attachment, in view of the Specification, to be something more than an attachment by a removable pin. As such, we cannot interpret the removable pin 15 in Cairns as achieving a fixed attachment of the articulated actuating arms 9 and 10 to the brackets 2 and 3.

Accordingly, we reverse the rejection of claim 6.

CONCLUSIONS

We conclude:

The Appellant has not shown that the Examiner erred in rejecting claims 1-5 and 7-10 under 35 U.S.C. §102(b) as being anticipated by Cairns,

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but the Appellant has shown that the Examiner erred in rejecting claim 6 under the same grounds.

DECISION

The decision of the Examiner to reject claims 1-5 and 7-10 is AFFIRMED.

The decision of the Examiner to reject claim 6 is REVERSED.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED-IN-PART

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Jordan M. Meschkow
Meschkow & Gresham, PLC
Suite 409
5727 North 7th Street
Phoenix, AZ 85014