

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RONALD R. SNYDER SR, CHARLES E. WILK JR,
LAWRENCE W. THAU JR, DOUGLAS R. DOLE, and
TERRANCE M. CAROM

Appeal 2007-4267
Application 10/299,164
Technology Center 3600

Decided: February 29, 2008

Before HUBERT C. LORIN, JENNIFER D. BAHR, and
JOSEPH A. FISCHETTI, *Administrative Patent Judges*.

BAHR, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Ronald R. Snyder Sr. et al. (Appellants) appeal under 35 U.S.C. § 134 from the Examiner's decision rejecting claims 14-22, 26, 28, 31, and 33.

Claims 1-13, 23-25, 27, 29, 30, 32, and 38-55 have been canceled.¹ Claims 34-37, the only other pending claims, have been objected to by the Examiner as depending from a rejected claim. We have jurisdiction over this appeal under 35 U.S.C. § 6 (2002).

The Invention

Appellants' claimed invention is directed to couplings for pipes and especially to mechanical fittings that "effect a strong, reliable joint with a fluid-tight seal without the need for brazing or soldering" (Specification 1:11-15). Appellants' coupling utilizes a retainer 44 comprising a circumferential retainer flange 54 and teeth 60 arranged circumferentially around the retainer flange 54 and projecting radially inwardly thereof. Teeth 60 are resiliently biased to engage the outer surface 50 of pipe end 46. (Specification 15:25-29 and 16:2-4; fig. 2) Outward motion of pipe end 46 will tend to simultaneously compress and rotate the teeth 60 inwardly causing them to dig into the pipe outer surface 50 and retain the pipe within the coupling "in a self-jamming manner such that, as greater force is applied to withdraw the pipe from the coupling the teeth 60 dig further and exert proportionally greater force to resist outward motion until they bend or buckle" (Specification 16:9-16).

Claim 14, the only independent claim involved in this appeal, reads as follows:

14. A pipe coupling sealingly engageable with a pipe end, said pipe coupling comprising:

¹ Claims 1, 2, 6, 7, 9, 12, 25, and 51-54 were canceled, and claim 26 was amended, subsequent to the Final Rejection (Amendment filed January 18, 2005).

a coupling housing having a socket with a diameter sized to receive and circumferentially support said pipe end;

a first expanded region positioned adjacent to one end of said socket, said first expanded region having a larger diameter than said socket;

a sealing member positioned in said first expanded region to effect a seal between said pipe coupling and said pipe end;

a second expanded region positioned adjacent to said first expanded region, said second expanded region forming an open end of said coupling housing for receiving said pipe end, a shoulder being positioned between said first and second expanded regions;

a retainer positioned within said second expanded region and being engageable circumferentially with said pipe end for retaining said pipe end within said pipe coupling, said retainer having a circumferential retainer flange; and

a clamping tab attached to said coupling housing and positioned at said open end, said clamping tab extending substantially radially inwardly in spaced relation to said shoulder and being biased toward said shoulder and clamping said retainer flange between said clamping tab and said shoulder for holding said retainer within said coupling housing.

The Rejections

The following rejections are before us for review:

Claim 26 stands rejected under 35 U.S.C. § 112, second paragraph, as indefinite for failing to particularly point out and distinctly claim the subject matter Appellants regard as the invention.

Claims 14-16, 26, 28, and 33 stand rejected under 35 U.S.C. § 102(b) as anticipated by Pritchatt (US 4,834,428, issued May 30, 1989).

Claim 31 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Pritchatt in view of Yang (US 5,160,175, issued November 3, 1992).

Claims 14-16, 26, 28, and 33 stand rejected under 35 U.S.C. § 102(b) as anticipated by Piero (US 5,792,990, issued August 11, 1998).

Claim 31 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Piero in view of Yang.

Claims 14, 16, 26, and 31 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as unpatentable over claims 1, 2, 4, 5, 10, 12, 13, 15-17, 19, 22, 25, 34, and 35 of copending Application 10/007,951.

Claims 14-21, 26, 28, and 31 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as unpatentable over claims 1, 7-9, 14, 16, 21-25, 27-31, and 34 of copending Application 10/299,281.

Claims 14-16 and 18-22 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as unpatentable over claims 1, 2, 4, 5, 10, 12, 13, and 14-18 of copending Application 10/123,607.

We make reference in this decision to the Examiner's Answer (mailed October 4, 2005) and Appellants' Appeal Brief (filed July 19, 2005) and Reply Brief (filed November 30, 2005).

OPINION

The Indefiniteness Rejection

The basis for the Examiner's rejection of claim 26 as indefinite is the recitation of a "Standard" without incorporation of the Standard limitations into the claim (Answer 3-4). As pointed out by Appellants (Reply Br. 2), the reference to "said ASME Standard" was deleted from claim 26 subsequent to the Final Rejection in the Amendment filed January 18, 2005, leaving no reference to any "Standard" in claim 26, thus overcoming the Examiner's rejection. The rejection cannot be sustained.

The Rejections under 35 U.S.C. §§ 102 and 103 based on Pritchatt and Pritchatt in view of Yang

Both of these rejections are grounded in part on the Examiner's determination that flexible portion 22 and radially inner finger portion 26 of Pritchatt's sealing ring 20 are a retainer for retaining said pipe within said pipe coupling, as recited in claim 14 (Answer 7). Appellants argue that "[t]here is no teaching in Pritchatt that ring 20, or any of its parts, acts to retain one pipe within another" and that "[t]here is simply no mechanism or means present in ring 20 which would hold the pipe elements together, nor has the Examiner explained how such a seal could act as a retainer as understood in this art" (Reply Br. 3-4). Thus, the issue presented is whether flexible portion 22 and radially inner finger portion 26 of Pritchatt's sealing

ring 20 are a retainer for retaining said pipe within said pipe coupling, as recited in claim 14.

When construing claim terminology in the United States Patent and Trademark Office, claims are to be given their broadest reasonable interpretation consistent with the specification, reading claim language in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004).

The term “retain” is ordinarily understood to mean “to keep in a fixed state or condition” and a “retainer” is “a person or thing that retains.”

Webster's New World Dictionary 1213 (David B. Guralnik ed., 2nd Coll. Ed., Simon & Schuster, Inc. 1984). These definitions are consistent with the disclosure of Appellants’ retainer 44 on pages 15 and 16. As discussed above, Appellants’ retainer 44, with its teeth 60, retains the pipe within the coupling in such a manner that, once inserted into Appellants’ coupling, the pipe is locked against being backed out of the coupling without destroying the retainer. Specifically, outward motion of pipe end 46 will tend to simultaneously compress and rotate the teeth 60 inwardly causing them to dig into the pipe outer surface 50 and retain the pipe within the coupling “in a self-jamming manner such that, as greater force is applied to withdraw the pipe from the coupling the teeth 60 dig further and exert proportionally greater force to resist outward motion until they bend or buckle” (Specification 16:11-16).

We agree with Appellants that Pritchatt provides no teaching that sealing ring 20, or flexible portion 22 and radially inner finger portion 26 thereof, acts to retain the clayware pipe 12 within the pipe connector. In

fact, Pritchatt specifically discusses removal of the pipe from the sleeve 10 of the connector without destroying the sealing ring 20 or any component thereof (col. 3, l. 53 to col. 4, l. 12). We thus conclude that flexible portion 22 and radially inner finger portion 26 of Pritchatt's sealing ring 20 do not satisfy the limitation in claim 14 of a retainer for retaining said pipe within said pipe coupling.

Appellants' argument demonstrates the Examiner erred in rejecting claim 14, and claims 15, 16, 26, 28, and 33 depending from claim 14, as anticipated by Pritchatt. The rejection cannot be sustained.

In rejecting claim 31 as unpatentable over Pritchatt in view of Yang, the Examiner relies on Yang solely for its teaching of a coupling housing comprising an elbow fitting (fig. 4; col. 1, ll. 57-59) (Answer 11). The Examiner does not rely on Yang for any teaching that would remedy the above-noted deficiency of Pritchatt.² Thus, Appellants' argument also demonstrates the Examiner erred in rejecting claim 31 as unpatentable over Pritchatt in view of Yang. The rejection cannot be sustained.

² Yang discloses a lock ring 5, with curved teeth 52, very similar to Appellants' retainer 44, for firmly retaining the pipe 10 in the coupling 1 (col. 2, ll. 15-36; figs. 1 and 2). The Examiner has not relied on this teaching in combination with Pritchatt, however, and it is not apparent to us that a person of ordinary skill in the art would have found a reason to use such a lock ring to retain a clayware pipe 12 in Pritchatt's pipe connector, much less a lock ring having a retainer flange clamped between the shoulder and a clamping tab, as also required in claim 14.

*The Rejections under 35 U.S.C. §§ 102 and 103 based on Piero and
Piero in view of Yang*

The dispositive issue involved in the appeal of both of these rejections is whether Piero's elastic member 16 and rings 8 and 10 satisfy the limitation in claim 14 of a retainer for retaining said pipe within said pipe coupling, as contended by the Examiner (Answer 9). Appellants argue that Piero provides no teaching that resilient member 16 can act as a retainer and, further, point out that Figure 3 of Piero clearly shows that member 16 allows the tube 4 to be inserted or removed from body 1 (Reply Br. 6).

Appellants' position that Piero's resilient member 16 allows the tube 4 to be removed from body 1, and thus is not a retainer for retaining the tube within a coupling, as called for in claim 14, is supported by Piero's disclosure. Specifically, Piero teaches that

the inner arm 20 of the resilient member 16 projects radially into the cavity 2 by distance e which is less than the radius r of the wire constituting the member 16. This ensures that the inner arm 20 deforms radially outwardly during the insertion of the tube ***without causing the tube to jam against the arm 20*** even when the end of the tube 4 has a sharp edge.

(col. 2, l. 65 to col. 3, l. 4; emphasis added) When tube 4 is inserted into cavity 2 of body 1, as illustrated in Figure 3, the inner arm 20 of resilient member 16 exerts a radially compressive *resilient* force on the external wall surface of tube 4, thus ensuring the electrical connection between member 16 and the tube 4 (col. 3, ll. 14-18). Piero's resilient member 16 is intended to ensure the electrical connection with the tube 4, but is not designed to retain the tube 4 within the cavity of body 1. Unlike the teeth 60 of

Appellants' retainer 44, which dig into the pipe outer surface "in a self-jamming manner" (Specification 16:12-13), the inner arm 20 of Piero's resilient member 16 is specifically designed to deform outwardly and exert a radially compressive *resilient* force on the tube outer surface without causing the tube to jam against the arm 20, and thus does not retain the tube within the body 1 by preventing the tube from backing out of the body 1.

In light of the above, Appellants' argument demonstrates the Examiner erred in rejecting claim 14, and claims 15, 16, 26, 28, and 33 depending from claim 14, as anticipated by Piero. The rejection cannot be sustained.

In rejecting claim 31 as unpatentable over Piero in view of Yang, the Examiner relies on Yang solely for its teaching of a coupling housing comprising an elbow fitting (fig. 4; col. 1, ll. 57-59) (Answer 11). The Examiner does not rely on Yang for any teaching that would remedy the above-noted deficiency of Piero.³ The rejection of claim 31 as unpatentable over Piero in view of Yang cannot be sustained.

The Obviousness-type Double Patenting Rejections

Appellants do not contest the Examiner's rejections under the judicially created doctrine of obviousness-type double patenting. Accordingly, we summarily sustain these rejections.

³ The Examiner has not relied on Yang's teaching of lock ring 5, with curved teeth 52, for firmly retaining pipe 10 within a coupling, in combination with Piero, and it is not apparent to us that a person of ordinary skill in the art would have found a reason to use such a lock ring to retain tube 4 in cavity 2 of body 1 of Piero, especially in view of Piero's expressed concern with not jamming the tube 4 against inner arm 20 of resilient member 16.

CONCLUSION

The rejection of claim 26 under 35 U.S.C. § 112, second paragraph, the rejections of claims 14-16, 26, 28, and 33 under 35 U.S.C. § 102(b) as anticipated by Pritchatt and by Piero, and the rejections of claim 31 under 35 U.S.C. § 103(a) as unpatentable over Pritchett in view of Yang and Piero in view of Yang are reversed. The obviousness-type double patenting rejections of claims 14-22, 26, 28, and 31 are summarily sustained. The Examiner's decision is affirmed as to claims 14-22, 26, 28, and 31 and reversed as to claim 33.

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

vsh

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