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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JAMES L. EBERT

Appeal 2018-002608
Application 14/153,507
Technology Center 3700

Before JOHN C. KERINS, ANNETTE R. REIMERS, and
FREDERICK C. LANEY, *Administrative Patent Judges*.

LANEY, *Administrative Patent Judge*.

DECISION ON APPEAL
STATEMENT OF THE CASE

Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner’s decision to reject claims 1–7 and 21–27 (entered Feb. 28, 2017, “Non-Final Act.”).² We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies James L. Ebert as the real party in interest. Appeal Br. 1.

² Claims 8–12 were withdrawn and 13–20 have been cancelled. *Id.*

THE CLAIMED SUBJECT MATTER

Appellant's Specification describes the invention as relating "to a boring machine, mounting assembly and method suitable for repairing a damaged semi-tractor or trailer axle." Spec. ¶ 1.

Claims 1 and 21 are independent. Claim 1 is reproduced below and is illustrative of the claimed subject matter.

1. A mounting assembly for use with axle boring equipment comprising, in combination,
 - a first portion having a first front clamp and a first rear clamp, a first pair of stanchions securing said first front clamp and said first rear clamp together in fixed, spaced apart relationship, said first clamps each defining first axle openings, a pair of circumferentially spaced apart jaws secured to each of said first clamps within said first axle openings and having faces adapted to engage an outside surface of an axle, and a plurality of openings in said first front clamp adapted to receive threaded fasteners,
 - a second portion having a second front clamp and a second rear clamp, a second pair of stanchions securing said second front clamp and said second rear clamp together in fixed, spaced apart relationship, said second clamps each defining second axle openings, a pair of circumferentially spaced apart jaws secured to each of second clamps within said second axle openings and having faces adapted to engage an outside surface of an axle, and a plurality of openings in said second front clamp adapted to receive threaded fasteners, and
 - a pair of fasteners extending between said first front clamp and said second front clamp and a pair of fasteners extending between said first rear clamp and said second rear clamp.

REJECTIONS³

References	Basis 35 U.S.C.	Claims Rejected
Smith, ⁴ Dwileski ⁵	§ 103	1–6, 21–26
Smith, Dwileski, Lucker ⁶	§ 103	7, 27

ANALYSIS

For independent claims 1 and 21, the Examiner finds that the combined teachings of Smith and Dwileski disclose all of the recited limitations and that a skilled artisan, at the time of the invention, would have known to assemble the parts in the manner claimed. Non-Final Act. 2–4 (citing Smith Figs. 1–2; Dwileski Figs. 1–4). In particular, the Examiner found Smith to disclose each recited element except “a pair of circumferentially spaced apart jaws secured to the clamps,” which the Examiner found alignment element 60 of Dwileski to disclose. *Id.* at 4. And the Examiner found that a skilled artisan would have known to assemble the parts as recited “in order to provide interchangeable and selectable clamping structures to suit various materials and applications of the Smith device.” *Id.* Appellant contends that “combining the alignment elements (60) of Dwileski into the clamp members (16, 17) of Smith would, without argument, defeat a

³ The Examiner created some ambiguity by stating “[c]laim(s) 1-6 and 21-26 is/are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Smith,” but then proceeded to rely on the combination of Smith and Dwileski to reject these claims. Non-Final Act. 2, 4. Appellant, however, appropriately recognized that the Examiner’s rejection relied on obviousness under 35 U.S.C. § 103. Appeal Br. 7–8.

⁴ US 3,252,192, iss. May 24, 1966 (“Smith”).

⁵ US 2006/0156531 A1, pub. July 20, 2006 (“Dwileski”).

⁶ US 2,924,128, iss. Feb. 9, 1960 (“Lucker”).

primary goal of Smith: to evenly distribute clamping forces on a pipe so that even thin wall pipe will not suffer distortion or damage.” Appeal Br. 16, 19; *see id.* at 21–22. As a result, Appellant contends that the Examiner’s reliance on the combination of Smith and Dwileski was misplaced. *Id.* at 16, 19, 24–25.

The Examiner disagrees that the jaws of Dwileski undermine a primary goal of Smith to distribute clamping forces evenly on a pipe. Ans. 9. As support for this position, the Examiner provides the following reasoning:

Dwileski is similarly concerned with evenly applying a gripping force over a greater area to avoid pipe wall damage. Dwileski teaches the use of gripping elements 60 (see figures 4A-F) which are formed in such a way as to apply the gripping force over an arcuate contact surface. While Dwileski illustrates a set screw type element 105, this element 105 does not grip or contact the sidewalls of any pipe member, rather, only sets a weld gap between end walls of the pipe. Accordingly, the incorporation of the gripping elements 60 of Dwileski into the device of Smith does not frustrate the purpose of Smith because the gripping elements of Dwileski similarly address the problem of damaging set screw grippers by providing gripping elements which evenly apply the gripping force about the pipe wall.

Id. at 9–10. Appellant contends that the Examiner’s reasoning above is unsupported and internally inconsistent. Reply Br. 3–4.

We agree with Appellant that the rejection of independent claims 1 and 21 is flawed. The Examiner has not shown with sufficiency that a skilled artisan would have known to modify Smith in view of Dwileski in the manner claimed. Smith teaches that disadvantages exist with known “set screw type elements,” which “are mounted around the pipe in a clamping ring and are threaded into engagement with the wall of the pipe to provide

gripping.” Smith 1:27–30. The disadvantage with these “set screw type elements,” according to Smith, is that “the amount of gripping provided by each set screw element is limited when the set screw is not threaded against the pipe with sufficient force to provide substantial distortion or damage to the pipe wall.” *Id.* at 1:31–35.

Smith teaches countering this disadvantage by providing gripping of the pipe wall “over a substantial area” that is evenly applied. Smith 1:39–42, 1:68–2:5. Smith teaches accomplishing this by providing a clamping apparatus “with a layer of relatively hard and relatively small particles along the gripping surface which are embedded in an adhesive.” *Id.* at 1:42–45. “The gripping is evenly distributed over a relatively large area so substantially any axial force can be supported, even on thin walled pipe, without destructive load concentrations on the pipe wall at any point along the clamping surface.” *Id.* at 2:38–42. Smith teaches,

The very small penetrations of the shot particles into the surface of the pipe wall do not produce any serious weakening of the wall and do not tend to produce collapsing of the pipe since the penetrations are extremely small and the forces are uniformly applied around the entire circumference of the pipe. This uniform application of pressure permits extremely high clamping forces without producing any collapsing of the pipe wall.

Id. at 3:41–48.

Although the Examiner recognized part 105 from Dwileski to be a “set screw type element,” which was used to set a welding gap, the Examiner appears to err by ignoring that element 60 is likewise a “set screw type element.” The Examiner states that “Dwileski is similarly concerned with evenly applying a gripping force over a greater area to avoid pipe wall damage,” but there is no evidence provided to support this contention. Ans.

9. Dwileski teaches mounting a plurality of elements 60 around the pipe in a clamping ring and threading them into engagement with the wall of the pipe to secure the pipe within the jaws 21 and 22. Dwileski ¶¶ 44, 62. Dwileski describes using an iterative process to apply pressure, secure, and axially align the pipe within the jaws. *Id.* ¶¶ 63, 72, 80. As such, Dwileski's element 60 appears to be the exact type of part (i.e., a "set screw type element") that Smith would discourage a skilled artisan from using to modify its disclosed apparatus. In addition, elements 60 of Dwileski would cause the securing forces to be concentrated into the relatively small areas defined by elements 60, rather than the desired evenly distributed forces over a relatively large area defined by jaws 21 and 22 that Smith suggests to be an important objective for its apparatus. Given these facts, we are not persuaded the Examiner has shown independent claims 1 and 21 would have been obvious in view of Smith and Dwileski.

Therefore, because the Examiner's determination that claims 1 and 21 are unpatentable is flawed and the remaining claims all depend therefrom, we do not sustain the Examiner's rejections of claims 1-7 and 21-27.

DECISION

The Examiner's rejections of claims 1-7 and 21-27 are reversed.

In summary:

Appeal 2018-002608
Application 14/153,507

Claims Rejected	Basis 35 U.S.C.	Reference(s)	Affirmed	Reversed
1-6, 21-26	§ 103	Smith, Dwileski		1-6, 21-26
7, 27	§ 103	Smith, Dwileski, Lucker		7, 27
Overall Outcome				1-7, 21-27

REVERSED