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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte WOLFGANG JEKEL, FRANK NACHBAR, HAUKE FRENZEL,
IGNACIO LOBO CASANOVA, ANDREAS TEMMEN,
and CHRISTIAN STELTER

Appeal 2020-001012
Application 13/881,033
Technology Center 3700

Before ANTON W. FETTING, AMEE A. SHAH, and
RACHEL H. TOWNSEND, *Administrative Patent Judges*.

SHAH, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), the Appellant¹ appeals from the Examiner's final decision to reject claims 18–37, which are all of the pending claims. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. The Appellant identifies the real party in interest as “ZF FRIEDRICHSHAFEN AG.” Appeal Br. 1.

CLAIMED SUBJECT MATTER

The Appellant's invention "concerns a method for producing a chassis component." Spec. ¶ 4. In particular, "the purpose of the present invention is to protect a chassis component . . . more effectively against corrosion," the chassis component comprising "a structural component and one or more joints solidly connected thereto." *Id.* ¶¶ 7, 11.

Claims 18, 30, and 35 are the independent claims. Claim 18 is illustrative of the subject matter on appeal and is reproduced below (with added bracketing for reference):

18. A method of producing a chassis component, the method comprising:

[(a)] forming a joint holder (15) in a planar member of a structural component (3), and the planar member of the structural component having a material thickness;

[(b)] forming a joint cartridge (5) from a single piece of material which has a unitary wall (14) that delimits an inside space and the single piece of material defines both a permanently closed end and a single opening (7) opposing the permanently closed end;

[(c)] inserting the joint cartridge (5) into the joint holder (15) so that the single opening (7) of the joint cartridge (5) is inserted first through the joint holder (15) of the structural component (3), the joint cartridge defining a central axis and having a collar (16) comprising a radially extending surface, and the joint cartridge (5) being inserted into the joint holder (15) until an entirety of the radially extending surface of the collar (16) of the joint cartridge (5) abuts the joint holder (15) such that the structural component (3) is located between the collar (16) of the joint cartridge (5) and the single opening (7) in the joint cartridge (5);

[(d)] assembling a bearing shell (12) and a joint ball (11) of a ball stud (6) through the single opening of the joint cartridge

(5) to form a ball joint (2), securing the ball joint (2) in the joint cartridge (5) by curving the wall (14) of the single piece of material, adjacent the single opening (7), inwardly to reduce a diameter of the single opening (7) so that the reduced diameter of the single opening (7) solely secures the bearing shell (12) and the joint ball (11) within the joint cartridge (5);

[(e)] welding the joint cartridge (5) to the structural component (3) via a weld zone (18) to form a solid connection, the structural component (3) being sandwiched between the weld zone (18) and the collar (16) and the weld zone (18), which is formed by welding the joint cartridge (5) to the structural component (3), is located between the structural component (3) and the single opening (7) in the joint cartridge (5); and

[(f)] covering the weld zone (18), formed during the welding, with a sealing bellows (8), which covers the weld zone and abuts against the structural component (3) and provides protection of the weld zone (18) against corrosion.

Appeal Br. 12–13 (Claims App.).

REFERENCES

The prior art relied upon by the Examiner is:

Name	Reference	Date
Stephenson	US 3,574,363	Apr. 13, 1971
Pyles	US 4,283,833	Aug. 18, 1981
Nordloh et al. (“Nordloh”)	US 5,601,305	Feb. 11, 1997
Ersoy et al. (“Ersoy”)	US 2004/0170470 A1	Sept. 2, 2004
Motofumi ²	JP 2006307970 (A)	Nov. 9, 2006
Boltshauser	US 2009/0003972 A9	Jan. 1, 2009

² We rely on the English translation entered into the record by the Examiner on June 1, 2015.

REJECTIONS

Claims 18, 20–28, 30–35, and 37 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Motofumi and Pyles.

Claim 19 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Motofumi, Pyles, Stephenson, and Boltshauser.

Claim 29 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Motofumi, Pyles, and Nordloh.

Claim 36 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Motofumi, Pyles, and Ersoy.

OPINION

The Appellant does not argue the rejections of claims 18–37 separately. Therefore, we consider these claims as a group with claim 18 representative and the rejections of claims 19–37 standing or falling therewith. *See* 37 C.F.R. § 41.37(c)(1)(iv) (2018).

The Appellant contends that the Examiner’s rejection of independent claim 18 is in error because: (1) Motofumi does not teach a planar member of a structural component as recited in limitation (a) (*see* Appeal Br. 5); (2) Motofumi does not teach a housing formed from a single piece of material as recited in limitation (b) (*see id.* at 6); and (3) the Examiner relies on hindsight reasoning for combining Motofumi with Pyles (*see id.* at 10). For at least the following reasons, we are not persuaded of error on the part of the Examiner by these arguments.

Regarding limitation (a) requiring “a planar member of a structural component,” the Examiner finds Motofumi’s structural component, arm 31, has a planar member, flat portion of plate surface 49. Final Act. 2; Ans. 20.

The Appellant argues that “49 is NOT planar, but has a large curved section (burr) that separates the base of the bellows 14 from the collar 11.” Appeal Br. 5 (*italics omitted*). However, as the Examiner points out, the Examiner does not rely on Motofumi’s burring part 32 as teaching the planar member; rather, the Examiner relies on the flat portion of plate surface 49 as the planar member of arm 31. Ans. 20. The Examiner’s finding is supported. *See, e.g.*, Motofumi 1, Fig. 1. We note that the claim requires only that there be a planar member of a structural component, i.e., at least a portion of the structural component be planar; it does not require the entire structural component be planar.

The Appellant’s argument regarding limitation (b)’s requirement of a housing formed from a single piece (*see* Appeal Br. 6) is unpersuasive because the Appellant argues against Motofumi individually when the Examiner relies on the combination of Motofumi and Pyles for teaching this limitation. The test for obviousness is not what any one reference would have suggested, but rather what the combined teachings of the references would have suggested to those of ordinary skill in the art. *See In re Keller*, 642 F.2d 413, 426 (CCPA 1981). “[O]ne cannot show non-obviousness by attacking references individually were, as here, the rejections are based on combinations of references.” *Id.* (*citation omitted*). Here, the Examiner finds “Motofumi does not explicitly teach . . . forming a joint cartridge from a single piece of material” (Final Act. 3) and relies on Pyles for correcting this deficiency (*see id.* at 4). The Appellant does not provide argument or technical reasoning to rebut the Examiner’s finding that Pyles teaches forming a joint cartridge from a single piece of material.

The Appellant’s arguments that the Examiner relies on hindsight reasoning (*see* Appeal Br. 10) are unpersuasive of error because the Appellant does not provide sufficient argument, details, or technical reasoning why the Examiner’s articulated reasoning is ineffective to support the conclusion of obviousness. Here, the Examiner articulates clear reasons why it would have been obvious to one of skill in the art to “replace the collar (11) of Motofumi having filleted corners with the collar (64) of Pyles [sic] having acute corners as shown in Fig. 1 of Pyles,” “integrate the multi-part socket (8) of Motofumi with a closing plate (13) to form a single-piece socket (42) as taught by Pyles [sic],” “replace the stopping ring (51) of Motofumi with the weld (50) of Pyles [sic],” and “replace the flanged hole of Motofumi having a burring part (32) with a plain hole (24) of Pyles [sic].” Final Act. 4–5. The Examiner thus establishes a *prima facie* case of obviousness as the Examiner has provided articulated reasoning with rational underpinning to support a legal conclusion of obviousness. *See KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). The Appellant does not provide sufficient evidence or technical reasoning why the Examiner’s reasons are in error. *See In re Eli Lilly & Co.*, 902 F.2d 943, 945 (Fed. Cir. 1990). Rather, the Appellant simply argues that “[n]either Pyles ’833, nor Motofumi ’970, say anything of” the reasons stated by the Examiner. Appeal Br. 10 (*italics and underlining omitted*). The Appellant’s argument amounts to an argument that the Examiner’s reasoning is in error because the cited references do not explicitly provide a motivation to arrive at the proposed combination. However, there is no rigid requirement that the prior art explicitly disclose a particular benefit. As our reviewing court has stated:

KSR expanded the sources of information for a properly flexible obviousness inquiry to include market forces; design incentives; the “interrelated teachings of multiple patents”; “any need or problem known in the field of endeavor at the time of invention and addressed by the patent”; and the background knowledge, creativity, and common sense of the person of ordinary skill.

Perfect Web Tech., Inc. v. InfoUSA, Inc., 587 F.3d 1324, 1329 (Fed. Cir. 2009) (citing *KSR*, 550 U.S. at 418–21). The Appellant fails to address *why* the Examiner’s articulated reasoning is incorrect, is based on the Appellant’s Specification, or is otherwise ineffective to support the conclusion of obviousness.

For the above reasons, we are not persuaded of Examiner error, and we sustain the Examiner’s rejection under 35 U.S.C. § 103(a) of independent claim 18 and the rejections of claims 19–37 that stand with that of claim 18.

CONCLUSION

The Examiner’s decision to reject claim 18–37 under 35 U.S.C. § 103(a) is sustained.

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
18, 20–28, 30–35, 37	103(a)	Motofumi, Pyles	18, 20–28, 30–35, 37	
19	103(a)	Motofumi, Pyles, Stephenson, Boltshauser	19	
29	103(a)	Motofumi, Pyles, Nordloh	29	
36	103(a)	Motofumi, Pyles, Ersoy	36	
Overall Outcome			18–37	

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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).

AFFIRMED