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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JAMES R. GRIECO

Appeal 2019-003486
Application 15/085,773
Technology Center 3600

Before BRADLEY B. BAYAT, TARA L. HUTCHINGS, and
ROBERT J. SILVERMAN, *Administrative Patent Judges*.

BAYAT, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

James R. Grieco (Appellant)¹ appeals under 35 U.S.C. § 134(a) from the Examiner’s final decision rejecting claims 1–17 and 20, which are all the claims pending in the application. 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(a). Appellant identifies “Gulfstream Aerospace Corporation” as the real party in interest. Appeal Br. 3.

CLAIMED SUBJECT MATTER

Appellant's "invention generally relates to structural components and more particularly relates to a web component suitable for use with a snap-fit assembly." Spec. ¶ 2. Claims 1 and 20 are the only independent claims pending on appeal. Claim 1, reproduced below, is illustrative of the claimed subject matter.

1. A web component suitable for use with a snap-fit assembly, the web component comprising:

a unitary sheet metal member having a periphery, a first side and a second side, the sheet metal member including a plurality of protrusions integral with the sheet metal member, the plurality of protrusions extending from a first surface of the first side and from a second surface of the second side, the plurality of protrusions disposed in a region proximate a portion of the periphery and inset from the portion of the periphery, the sheet metal member further including a plurality of depressions extending into the first surface and into the second surface, the plurality of depressions being disposed in the region, the plurality of depressions being aligned with the plurality of protrusions, each depression of the plurality of depressions being spaced apart from each protrusion of the plurality of protrusions along the first side and the second side, the sheet metal member having a central region located within the periphery, the region forming an outer border of the central region, the central region being free of protrusions and depressions,

wherein the central region comprises a majority portion of the unitary sheet metal member.

Appeal Br. 15 (Claims Appendix).

REFERENCES

The prior art relied upon by the Examiner is:

Name	Reference	Date
Laven et al. (“Laven”)	US 5,442,885	Aug. 22, 1995
Pham	US 2004/0140165 A1	July 22, 2004
Kunichi et al. (“Kunichi”)	US 2009/0314892 A1	Dec. 24, 2009
Williams	US 2011/0147522 A1	June 23, 2011

REJECTIONS

The following rejections are before us for review:

- I. Claims 1–10 and 13–17 are rejected under 35 U.S.C. § 103 as unpatentable over Pham and Williams.
- II. Claims 11 and 12 are rejected under 35 U.S.C. § 103 as unpatentable over Pham, Williams, and Kunichi.
- III. Claim 20 is rejected under 35 U.S.C. § 103 as unpatentable over Pham, Williams, and Laven.

OPINION

Rejection I

We are persuaded by Appellant’s argument that Williams, on which the Examiner relies, fails to disclose a “plurality of protrusions extending . . . from a second surface of the second side” of the sheet metal member. Appeal Br. 10; Reply Br. 2–3.

In rejecting claim 1, the Examiner acknowledges that the primary reference Pham does not disclose this disputed limitation. *See* Final Act. 3 (Pham “fails to disclose the protrusions protruding from the second side”). To cure this deficiency, the Examiner finds Williams discloses a planar rib web 10 that corresponds to the second side of the claimed sheet metal member, including “protrusions protruding from the second side (18 [sic,

11]² projects each way)”) corresponding to the claimed plurality of protrusions extending from a second surface of the second side of the sheet metal member. *Id.*

Appellant argues that Williams does not teach a plurality of protrusions protruding from the second surface of the second side of the sheet metal member, as proffered by the Examiner, because “[t]he upper rib feet 11 and lower rib feet 12 illustrated in Williams are not surrounded by the surface of Williams’ rib.” Appeal Br. 10. Appellant asserts that “[t]he dictionary defines the term ‘protrude’ as meaning to jut out from the surrounding surface.” *Id.* (citing <https://www.merriam-webster.com/dictionary/protrude>). According to Appellant, “[d]efinitionally, something cannot protrude from a surface if it is adjacent to that surface . . . [because] from the language of the claim itself, the protrusion **must** protrude from **the surface** of the second side of the sheet metal member.” *Id.* (“This limitation cannot be met by a structure that is positioned next to the surface.”). “Because Williams’ upper rib feet 11 and lower rib feet 12 are attached to the edge of Williams’ rib, [Appellant asserts that] they cannot protrude from the surface of Williams’ rib.” *Id.*

Responding to Appellant’s argument, the Examiner states:

This argument is not found persuasive. First, Appellant’s application provides no definition for the term, “protrude,” or as further claimed, “protrusions” or “protruding.” Second, the argued definition of “protrude” by Appellant is not the only definition. Merriam-Webster also defines the terms, “protrude”

² The Examiner mistakenly points to bolt holes 18 as the claimed protrusions, but in response to Appellant’s argument in the Answer the Examiner acknowledges that rib feet 11 and 12 correspond to those protrusions. *See Answer 6.*

and “protruding” as “to stick out” and “to cause to project.” The Oxford English online dictionary defines “protrude” as to “extend beyond or above a surface.” Even if 11 and 12 of Williams are disposed adjacent to the first or second surface of the rib, each clearly “sticks out,” “projects,” and “extends beyond or above” the first and second surface of the rib. 11 and 12 of Williams satisfy all three conventional definitions of the phrase “protrude.” Third, nothing in Appellant’s claim language requires any sort of contact solely with the first and second surface, nor does it require the protrusions disposed only on the first and second surface, nor does it require that the protrusion cannot be placed on a side edge adjacent the first and second surface. As 11 and 12 of Williams are disposed on a side edge, forming an “L” shape with the first and second surface, each of 11 and 12 clearly makes contact with the first and second surface of the rib. Each of 11 and 12 of Williams clearly sticks out, projects, and extends beyond or above the first and second surface, and thus, constitutes a protrusion protruding from the first and second surfaces.

Answer 5–6.

We are persuaded of Examiner error.

As our reviewing court has emphasized, “[c]laims must be ‘interpreted with an eye toward giving effect to all terms in the claim.’” *Becton, Dickinson & Co. v. Tyco Healthcare Group, LP*, 616 F.3d 1249, 1257 (Fed. Cir. 2010) (quoting *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 950 (Fed.Cir.2006)). *See also In re Power Integrations, Inc.*, 884 F.3d 1370, 1376 (Fed. Cir. 2018) (explaining that a “problem with the board’s claim construction is that it renders claim language meaningless.”); *In re Danly*, 263 F.2d 844, 847 (CCPA 1959) (“limit[ing] the claims to a construction in which a connection with a source of alternating current is actually made,” even though “not positively recite[d],” because “any other interpretation would render the [claimed] expression virtually meaningless”).

Here, claim 1 requires the plurality of protrusions extending “from a second surface of the second side” of the sheet metal member. *See* Claim 1 *supra*. The plain meaning of the term “surface” is “the outer face, outside, or exterior boundary of a thing.”³ This plain meaning is consistent with the meaning Appellant states the claim term is intended to have, as well as Appellant’s disclosure. *See, e.g.*, Spec., Fig. 4, (showing protrusions 48 extending from the surface of the second side), ¶ 36 (“plurality of protrusions 48 protrude from a surface of second side”). The difficulty with the Examiner’s finding is the exclusive focus on the term “protrusion” rather than the limitation as a whole, which requires the plurality of protrusions extending from a second surface, i.e., projecting from the outer face of a second side. We agree with Appellant that “[t]he claim does not recite that the protrusions protrude from a first side and from a second side of the sheet metal member. Rather, the claim recites that the protrusions protrude **from the surface** of the first side and **from the surface** of the second side.”

Reply Br. 2. As clearly stated by Appellant:

[The claim] describes the point of origin of the protrusions - they must protrude from the surface itself. Not next to the surface. Not near the surface. Not in the vicinity of the surface. Not proximate the surface. Not adjacent to the surface. They must protrude **from** the surface. Williams’s rib feet 11 and 12 are attached to the edge of rib 6. Therefore, rib feet 11 and 12 are adjacent to the first and second surfaces of Williams’s first and second sides. Because they are adjacent to the first and second sides, they do not protrude **from the surface** of the first side or **from the surface** of the second side as required by the express language of the rejected claims.

³ <https://www.dictionary.com/browse/surface> (last visited Dec. 5, 2019).

Id. at 2–3.

The Examiner’s interpretation of the claim language appears not to account for the term “from the surface,” which is inconsistent with the plain meaning of the claim language and Appellant’s corresponding disclosure in the Specification discussed above. This is evident from the rejection of record, because the Examiner’s corresponding finding leaves out the claim term “surface.” See Final Act. 4 (“the protrusions protruding from the second side”). Williams describes rib feet 11 and 12 as “extending from” the edge of the rib web, not its surface. See Williams ¶ 25. Indeed, the Examiner concedes that rib feet “11 and 12 of Williams are disposed on a side edge, forming an ‘L’ shape with the first and second surface” (*see supra*), but improperly equates contact between those structures with Williams’s rib as satisfying the contested claim limitation. See Answer 5 (“[E]ach of 11 and 12 clearly makes contact with the first and second surface of the rib.”). Although the Examiner is correct that rib feet 11 and 12 are adjacent to and connected to Williams’s rib web, but the claim does not require that the protrusions merely make contact with the second side; rather, the claim requires the protrusions extending from a second *surface* of the second side. In other words, the Examiner’s finding in Williams is based on an erroneous interpretation of the claim language, which appears to be focused on the term “protrude” in a vacuum instead of each of the claim elements as positioned and recited within the context of the claim as a whole.

In view of the forgoing, we do not sustain the rejection of independent claim 1. For the same reasons, we also do not sustain the rejection of dependent claims 2–10 and 13–17. *Cf. In re Fritch*, 972 F.2d 1260, 1266

(Fed. Cir. 1992) (“dependent claims are nonobvious if the independent claims from which they depend are nonobvious”).

Rejection II

Rejection of dependent claims 11 and 12 relies on the same deficient finding in Williams discussed above, which the additional reference to Kunichi fails to remedy. *See* Final Act. 7. As such, we do not sustain the rejection of claims 11 and 12.

Rejection III

Independent claim 20 contains a similar limitation as claim 1 (Appeal Br. 18–19 (Claims Appendix)). For the same reasons discussed above with respect to the obviousness rejection of independent claim 1, we do not sustain the rejection of claim 20 because the Examiner relies on the same erroneous findings as claim 1. *See* Final Act. 8–9.

CONCLUSION

The Examiner’s rejections of claims 1–17 and 20 under 35 U.S.C. § 103 are reversed.

DECISION SUMMARY

Claims Rejected	35 U.S.C. §	References	Affirmed	Reversed
1–10, 13–17	103	Pham, Williams		1–10, 13–17

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11, 12	103	Pham, Williams, Kunichi		11, 12
20	103	Pham, Williams, Laven		20
Overall Outcome				1-17, 20

REVERSED