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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte WILLIAM K. ACKERMANN, CLIFTON J. CRAWLEY JR., and
FREDERICK M. SCHWARZ

Appeal 2019-005603
Application 14/830,497
Technology Center 3700

Before MICHELLE R. OSINSKI, BARRY L. GROSSMAN, and
MICHAEL L. WOODS, *Administrative Patent Judges*.

WOODS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1–7 and 9–20. Appeal Br. 3. 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. Appellant identifies the real party in interest as United Technologies Corp. Appeal Br. 3.

CLAIMED SUBJECT MATTER

The application is titled “Seal Assembly for Rotational Equipment.”
Spec. ¶ 1. Claims 1 and 18 are independent. Appeal Br. 12–15 (Claims App.). We reproduce claim 18, below, with emphasis added to a particular limitation that is a primary focus of this Decision:

18. An aircraft propulsion system, comprising:

a rotor disk structure including a rotor disk and a conical linkage, wherein the rotor disk includes an annular counterweight mass and an annular web extending radially inward to the counterweight mass;

a stator structure; and

a seal assembly including a first seal element and a second seal element configured to form a seal with the first seal element, the first seal element circumscribing the rotor disk, and the second seal element configured with the stator structure and circumscribing the first seal element; *wherein the first seal element and the conical seal linkage are included in a single monolithic body.*

Appeal Br. 15 (Claims App.) (emphasis added).

REFERENCES

The evidence relied upon by the Examiner is:

Name	Reference	Date
Stueber	US 5,333,993	Aug. 2, 1994
Justak	US 8,002,285 B2	Aug. 23, 2011
Neal	US 4,657,482	Apr. 14, 1987

REJECTIONS

The following rejections are before us on appeal:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis
18, 20	102	Stueber
1-7, 9, 16, 17, 19	103	Stueber, Justak
10-15	103	Stueber, Justak, Neal

Final Act. 3-6.

OPINION

I. Claims 18, 20 – Anticipated by Stueber

The Examiner rejects claims 18 and 20 as anticipated by Stueber. Final Act. 3. Appellant argues claims 18 and 20 as a group. See Appeal Br. 7-9. We select claim 18 as the representative claim, with claim 20 standing or falling with claim 18. 37 C.F.R. § 41.37(c)(1)(iv).

The Examiner finds that Stueber discloses the limitations of claim 18, citing Stueber’s Figures 1 and 2. Final Act. 3. We reproduce Stueber’s Figure 2, below:

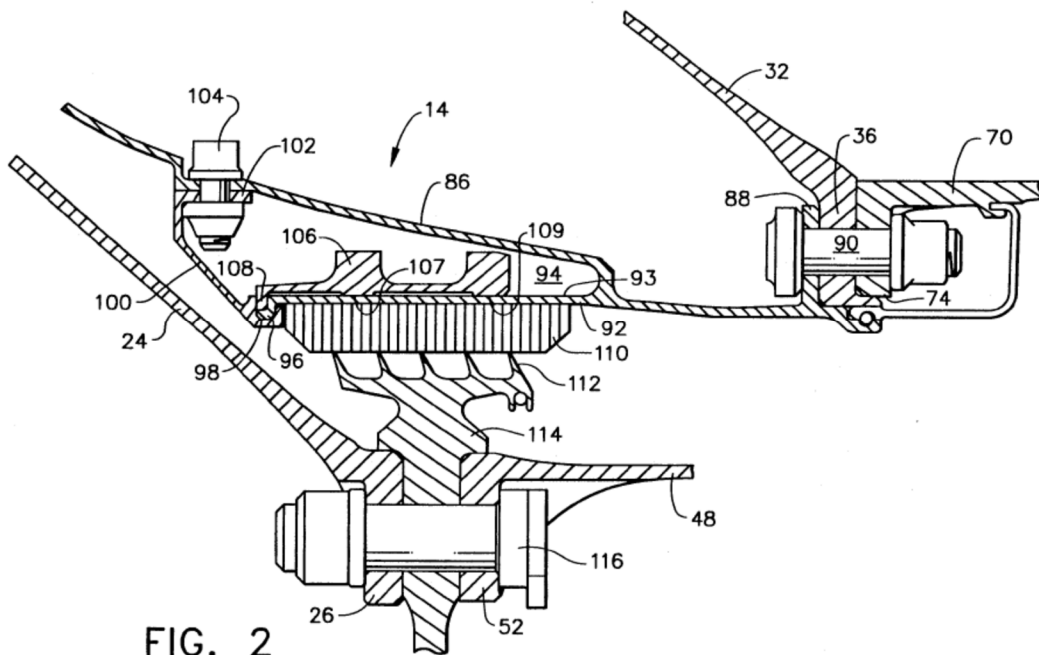


Figure 2 illustrates portions of a gas turbine engine, in particular, “the stator seal for the last stage compressor stator.” *See* Stueber, 2:34–38. The Examiner finds that this figure discloses the claimed “rotor disk” 114, “conical linkage” (or “conical seal linkage”) 24, “stator structure” 86, “seal assembly” 14, including “first seal element” 112 and “second seal element” 110 configured to form a seal with the first seal element. *See* Final Act. 3 (citing Stueber Figs. 1, 2). Most importantly, the Examiner finds that Stueber’s “first seal element” 112 and its “conical seal linkage” 24 “are included in a single monolithic body.” *Id.* (citing Stueber, Fig. 2). Notably, Stueber discloses that “first seal element” 112 is joined by bolt 116 to “conical seal linkage” 24. *See* Stueber, 3:58–60.

In appealing the rejection, Appellant disputes the Examiner’s finding that Stueber’s seal element 112 and conical seal linkage 24 “are included in a single monolithic body.” *See* Appeal Br. 7. In particular, Appellant argues, “FIG. 2 of Stueber illustrates the discretely formed seal teeth 112 are connected to the rearwardly extending cone 24 via the *bolt 116, which provides a mechanical interconnection.*” *Id.* at 8 (emphasis added).

In arguing that a bolted mechanical interconnection between the claimed “first seal element” and “conical linkage” prevents the two from being included in a “single monolithic body,” Appellant cites to the following disclosure from the Specification:

The support structure 82 may be configured having a monolithic full hoop body. Herein, the term “monolithic” may describe a component which is formed as a single unitary body. *The support structure 82, for example, includes an integral, tubular body that is formed without any mechanically interconnected axial and/or circumferential segments.*

Id. (citing Spec. ¶ 46)² (emphasis modified).

Appellant asserts that “based on this disclosure, a person of skill in the art would understand a monolithic body does not include mechanically interconnected segments.” *Id.*; *see also* Reply Br. 2–3 (arguing the same).

Appellant’s argument is not persuasive for at least three reasons.

First, the sentence cited by Appellant states in its entirety, “The support structure 82, *for example*, includes an integral, tubular body that is formed without any mechanically interconnected axial and/or circumferential segments.” Appeal Br. 8 (emphasis modified). Appellant’s argument ignores two key words: *for example*. Stated differently, the cited language simply describes a particular example of a monolithic component in which there are no “mechanically interconnected axial and/or circumferential segments.” The sentence does not clearly set forth a definition of “monolithic” that would preclude “mechanically interconnected axial and/or circumferential segments” from being “monolithic.” *See CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002) (explaining that a claim term will generally receive its ordinary meaning unless “the patentee acted as his own lexicographer and clearly set forth a definition of the disputed claim term in either the specification or prosecution history.”). Moreover, it is generally improper to read limitations from specific embodiments into the claims. *See Cadence Pharms. Inc. v. Exela PharmSci Inc.*, 780 F.3d 1364, 1369 (Fed. Cir. 2015) (“[E]ven if all of the embodiments discussed in the patent included a specific limitation, it

² Although Appellant cites to paragraph 4 of the Specification (Appeal Br. 8), we understand that Appellant intended to cite to paragraph 46. We find Appellant’s citation to paragraph 4 was an unintentional and harmless error. *See* Ans. 3 (confirming the same).

would not be proper to import from the patent’s written description limitations that are not found in the claims themselves.”) (internal quotations and citation omitted). We also point out that Appellant submits no other evidence, such as testimony from a skilled artisan or a definition of “monolithic,” to support its claim construction. *See* Appeal Br. 7–9; *see also* Reply Br. 2–3.

Second, Appellant fails to adequately address the language the Examiner relied on. In its entirety, Paragraph 46 of the Specification provides:

The support structure 82 may be configured having a monolithic full hoop body. Herein, the term “monolithic” may describe a component which is formed as a single unitary body. The support structure 82, for example, includes an integral, tubular body that is formed without any mechanically interconnected axial and/or circumferential segments. *Note, in some embodiments, a monolithic body may include one or more bodies bonded together.* In another example, arcuate segments (e.g., halves) may be respectively bonded together to form a full hoop body. The assembly 48 of the present disclosure, however, is not limited to the foregoing exemplary support structure configuration.

Spec. ¶ 46 (emphasis added).

Appellant’s argument largely overlooks that “in some embodiments, a monolithic body may include *one or more bodies bonded together.*” *Compare* Appeal Br. 7–9, *with* Final Act. 2 (“Paragraphs 0046 and 0053 of Applicant’s specification state that a monolithic body may include one or more bodies bonded together.”). Indeed, the Examiner relied on the “one or more bodies bonded together” language in construing “monolithic” to include Stueber’s two mechanical components bolted together. *See* Ans. 5

(“Stueber clearly illustrates a bonded connection of the seal teeth 112 and the rearwardly extending cone 24 as a monolithic body via the bolt 116.”).

Third, the Examiner submits a definition of “bond” as “a connection that fastens things together” to further support its finding that Stueber’s bolted structure satisfies the claimed “single monolithic body.” *See id.* (citing <https://www.vocabulary.com/dictionary/bond>). Appellant does not submit its own definition of “bond” to counter the Examiner’s definition and to otherwise support a position that bolted bodies are not bonded. *See* Appeal Br. 7–9; *see also* Reply Br. 2–3.

In summary, the Specification and the extrinsic evidence of record do not support Appellant’s construction of the term “monolithic.”

For the foregoing reasons, Appellant’s arguments do not apprise us of error in the Examiner’s rejection of claim 18, and of claim 20, which falls with claim 18. As such, we affirm the rejection of these claims as anticipated by Stueber.

II. Claims 1–7, 9, 16, 17, 19 – Unpatentable Over Stueber and Justak

The Examiner rejects claims 1–7, 9, 16, 17, and 19 as unpatentable over Stueber and Justak. Final Act. 3–4. These claims either depend from claim 18 or independent claim 1. *See* Appeal Br. 12–15 (Claims App.). In rejecting independent claim 1, the Examiner similarly relies on Stueber for disclosing seal land 112 and linkage 24 “configured together in a single monolithic body.” *See* Final Act. 3–4 (citing Stueber Figs. 1, 2).

Other than those unpersuasive arguments discussed above, Appellant does not present additional arguments contesting the rejection of these claims. *See* Appeal Br. 9–10.

Accordingly, Appellant does not persuade us of Examiner error in the rejection of claims 1–7, 9, 16, 17, and 19, and we affirm the rejection of these claims as unpatentable over Stueber and Justak.

III. Claims 10–15 – Unpatentable Over Stueber, Justak, and Neal

The Examiner rejects claims 10–15 as unpatentable over Stueber, Justak, and Neal. Final Act. 5–6. These claims depend from claim 1, and the Examiner similarly relies on Stueber for disclosing seal land 112 and linkage 24 “configured together in a single monolithic body.” *See id.* at 4–5.

Other than those unpersuasive arguments discussed above, Appellant does not present additional arguments contesting the rejection of these claims. *See* Appeal Br. 10.

Accordingly, Appellant does not persuade us of Examiner error in the rejection of claims 10–15, and we affirm the rejection of these claims as unpatentable over Stueber, Justak, and Neal.

CONCLUSION

The Examiner’s rejections of claims 1–7 and 9–20 are affirmed.

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Reversed	Affirmed
18, 20	102	Stueber		18, 20
1–7, 9, 16, 17, 19	103	Stueber, Justak		1–7, 9, 16, 17, 19
10–15	103	Stueber, Justak, Neal		10–15
Overall Outcome				1–7, 9–20

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TIME PERIOD FOR RESPONSE

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