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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* CHRISTOPHER DALE RUSSO,  
JACOB BOUTIN, and DAVID J. TILLEY

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Appeal 2019-005193  
Application 14/415,528  
Technology Center 3600

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Before HUBERT C. LORIN, NINA L. MEDLOCK, and  
KENNETH G. SCHOPFER, *Administrative Patent Judges*.

SCHOPFER, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant<sup>1</sup> appeals from the Examiner's decision to reject claims 21, 22, 31–33, 38, and 39.<sup>2</sup> We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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<sup>1</sup> 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 Halliburton Energy Services, Inc. Appeal Br. 2.

<sup>2</sup> The Examiner has indicated that pending claims 23–30, 34–37, and 40 recite allowable subject matter. Final Act. 7.

## BACKGROUND

The Specification discloses that “[t]he subject matter herein generally relates to a downhole tool, in particular the downhole tool is controlling torque loads between two different segments of a drillstring.” Spec. ¶ 1.

## CLAIMS

Claims 21 and 38 are the independent claims on appeal. Claim 21 is illustrative of the appealed claims and recites:

21. A compression set downhole clutch comprising:
  - an upper body comprising at least one engagement surface;
  - a lower body comprising at least one engagement surface;
  - the at least one engagement surface of the upper body and the at least one engagement surface of the lower body are each configured to couple with one another and rotate in unison in an engaged configuration;
  - a hydraulic member configured to be responsive to a predetermined pressure; and
  - the hydraulic member configured to disengage the at least one engagement surface of the upper body from the at least one engagement surface of the lower body in response to experiencing the predetermined pressure, the at least one engagement surface of the upper body engages the at least one engagement surface of the lower body upon relief of the predetermined pressure.

Appeal Br. 10.

## REJECTION

The Examiner rejects claims 21, 22, 31–33, 38, and 39 under 35 U.S.C. § 102(a)(1) as anticipated by Best.<sup>3</sup>

## DISCUSSION

As an initial matter, we note that Appellant raises arguments only with respect to claim 21 and relies on those arguments for all claims rejected. *See* Appeal Br. 4–8. Accordingly, we discuss only claim 21 below, and claims 22, 31–33, 38, and 39 will stand or fall with claim 21. *See* 37 C.F.R. 41.37(c)(1)(iv) (2017).

With respect to claim 21, the Examiner finds that Best discloses a downhole clutch as claimed, including an upper body 1a, a lower body 15/19, engagement surfaces 19/20, and a hydraulic member 22/5. Final Act. 3–4 (citing Best Fig. 1; col. 3, ll. 24–35; col. 4, ll. 1–6; col. 4, ll. 26–33). The Examiner finds that Best also discloses that the hydraulic member is disengaged under a predetermined pressure and re-engages once the predetermined pressure is relieved. *Id.* at 4. With respect to the configuration of the hydraulic member, the Examiner finds that Best discloses disengaging the engagement surface by pumping an activating ball 28 through the drill string, which increases the fluid pressure until the clutch is urged into its second, dis-engaged position. *Id.* The Examiner also finds that Best teaches the application of an overpressure to squeeze the ball into an open space 32 after which the fluid pressure decreases such that the spring urges the clutch back to the position in which it is re-engaged. *Id.*

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<sup>3</sup> Best et al., US 6,082,457, iss. July 4, 2000.

We agree with and adopt the Examiner’s findings with respect to claim 21. *See* Final Act. 3–4; *see also* Ans. 3–8. As discussed below, we are not persuaded of reversible error by Appellant’s arguments.

Appellant argues that Best cannot be relied upon as an anticipatory reference with respect to claim 21 because Best does not disclose re-engagement of the upper and lower bodies of the clutch “upon relief of the predetermined pressure.” Appeal Br. 5. More specifically, Appellant argues that “Best requires an over-pressure . . . event to move the ball past the ball receiver, and thus cannot engage upon relief of the predetermined pressure.” *Id.* at 6 (emphasis omitted). Appellant asserts that “Best requires a first pressure to disengage the clutch; a second pressure, greater than the first pressure, to move the ball past the ball seat; followed by release of the second pressure to reengage the clutch.” *Id.* (emphasis omitted).

To the extent Appellant is arguing that the claim language excludes the application of additional pressure before the predetermined pressure is relieved, we agree with the Examiner’s response. Specifically, the claim uses the open-ended transitional term “comprising” in the preamble, which indicates that the claim does not exclude additional, unrecited elements or steps. Ans. 3. Thus, the fact that Best might require an additional step before the lower body is re-engaged with the upper body is not, by itself, sufficient to show that Best does not anticipate the claim.

Further, we agree with the Examiner that the specific configuration required by the claim language itself does not exclude the Examiner’s interpretation of the claim, i.e., the claimed configuration of the hydraulic member does not preclude the application of additional pressure before the predetermined pressure is relieved and re-engagement occurs. During

prosecution, the scope of the claims is determined not solely on the basis of the claim language, but upon giving claims “their broadest reasonable interpretation consistent with the specification” and “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 Examiner’s interpretation is reasonable in light of the plain language of the claim, which does not exclude additional elements or steps, as noted above. Further, Appellant does not point to, and we are not aware of, anything in the written disclosure that would lead one of ordinary skill in the art to construe the claim more narrowly. To the extent the Specification discusses re-engaging the clutch, the Specification discloses that the clutch may be re-engaged once the pressure drops below the predetermined pressure, and we see no indication that Specification excludes the addition of an overpressure before this occurs. *See* Spec. ¶¶ 19, 35.

Given this claim interpretation, we find that the Examiner has adequately shown that Best anticipates the claim. Beyond indicating a disagreement with the Examiner’s claim interpretation, Appellant argues only that the claim language at issue cannot read on Best because Best requires relief of a second pressure before re-engagement occurs. *See* Appeal Br. 6. However, we adopt the Examiner’s explanation regarding why Best’s lower body must necessarily engage only after the predetermined pressure, as claimed, is relieved. *See* Ans. 4. Specifically, the pressure at which Best’s spring compresses (“X”) is analogous to the claimed predetermined pressure. The pressure at which the spring compresses would remain constant regardless of whether any overpressure is applied. Thus, the application of overpressure to pass Best’s ball 28 through seat 26 and into

cavity 32 does not change the predetermined pressure at which the spring compresses, i.e. “[t]he spring’s actuation pressure does not change.” Ans. 7. Once Best’s ball 32 is passed, the pressure is relieved, but the spring would not expand to reengage the lower and upper bodies until the pressure drops below the predetermined pressure, i.e. the pressure X at which the spring compresses.

Therefore, we agree with the Examiner that “the applied overpressure does not change the pressure at which the spring compresses and expands, and the claims only recite the pressure at which the clutch disengages (compression of the spring) and re-engages (expansion of the spring).” Ans. 7 (emphasis omitted).

Appellant also argues that Best does not anticipate the claims because “Best implements the over pressure event to allow the relief of any pressure [and] Best cannot reengage upon simple relief of the predetermined pressure.” Reply Br. 3 (emphasis omitted). We are not persuaded of error by this argument. As discussed above, the Examiner finds, and we agree, that the predetermined pressure claimed is analogous to the pressure X required to compress Best’s spring. Even if additional pressure must be applied in Best before relief can occur, we agree with the Examiner that the spring will only expand, and cause reengagement, once the pressure drops below X. Thus, we find that the claim language at issue, i.e., “the upper body engages . . . the lower body upon relief of the predetermined pressure,” reads on the re-engagement disclosed by Best. Appellant’s argument does not explain adequately why this is not the case.

Based on the foregoing, we are not persuaded of reversible error in the rejection of claim 21. Accordingly, we sustain the rejection of claim 21, and

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we also sustain the rejection of claims 22, 31–33, 38, and 39, which fall with claim 21.

**CONCLUSION**

We **AFFIRM** the rejection of claims 21, 22, 31–33, 38, and 39.

In summary:

| <b>Claims Rejected</b> | <b>35 U.S.C. §</b> | <b>Reference(s)/Basis</b> | <b>Affirmed</b>       | <b>Reversed</b> |
|------------------------|--------------------|---------------------------|-----------------------|-----------------|
| 21, 22, 31–33, 38, 39  | 102(a)(1)          | Best                      | 21, 22, 31–33, 38, 39 |                 |

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)(l)(iv).

**AFFIRMED**