

NOTE: This disposition is nonprecedential.

**United States Court of Appeals
for the Federal Circuit**

**SCHOELLER-BLECKMANN OILFIELD
EQUIPMENT AG,**
Appellant

v.

CHURCHILL DRILLING TOOLS US, INC.,
Appellee

2016-1494

Appeal from the United States Patent and Trademark
Office, Patent Trial and Appeal Board in No. IPR2014-
00814.

Decided: November 9, 2016

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ZINDA.

activator, which can be “launched down the drill string to engage a seat provided in the axially shiftable sleeve.” *Id.*, col. 6, ll. 34-40. This activator has “a ball-like portion 51 which engages the seat 13, and a dart-like portion 52 projecting downwardly therefrom.” *Id.*, col. 8, ll. 64-65. This mechanism may be deactivated by launching a set of small non-deformable balls, which block the flow control device, increasing pressure, which “eventually causes downward movement (accompanied by sufficient inward deformation of actuator 50) through the seat 13 and the sleeve 12.” *Id.*, col.9, ll. 36-38.

A further embodiment is pictured in Figures 9a and 9b, which show deformable activators 50a and 50b. To activate the bypass mode, a non-deformable ball blocks the passageway through the center of the activator and the slideable sleeve slides down the drill string to align the bypass ports. To deactivate the bypass mechanism, deactivating balls are launched, which further increases pressure by blocking the bypass ports, until the pressure deforms “the deformable portion 51 of the activator [which] then yields under this load, thereby allowing the entire activator to pass downwardly through the valve seat.” *Id.*, col.10, ll. 19-21.

On May 23, 2014, Churchill filed a petition for IPR. The Board instituted review as to claims 13-15, 17, and 18, as (1) anticipated by prior art WO 02/14650 A1, PCT/GB01/03492 (published Feb. 21, 2002) (“WO 02/14650”); (2) anticipated by U.S. Patent No. 4,310,050 (“Bourgoyne”); and (3) obvious over a combination of both.

After claim construction, the Board issued a final written decision, holding claims 13-15, 17, and 18 unpatentable on all three grounds.

We have jurisdiction over an appeal from a final decision in an IPR under 28 U.S.C. § 1295(a)(4)(A) and 35 U.S.C. § 319.

a hollow main body adapted for mounting in a drill-string and through which fluid to the tool can be routed;

an actuating sleeve defining a through-flow passage and slidably mounted in the main body for movement between positions corresponding to a through-flow mode and a by-pass mode of the mechanism;

biasing means acting on the sleeve to urge it to its position corresponding to the through-flow mode of the mechanism;

a seat providing access to said passage in the through-flow mode of the mechanism; and

a deformable activator capable of being launched down the drill-string to engage the seat and thereby cause pressure upstream of the seat to increase so that the activator moves the sleeve to its position corresponding to the by-pass mode of the mechanism;

in which the activator and the seat are arranged to co-operate with each other, when the activator engages the seat, in such a way that restricted flow of fluid through the sleeve is maintained when the mechanism is in its by-pass mode;}

[and] in which **the deformable activator comprises a ball-dart combination**, in which a **ball-like portion at least is deformable** and is capable of seating on said seat, and a dart-like portion is capable of projecting downwardly through the seat.

'397 patent, col. 15, ll. 22-44; *id.*, col. 16, ll. 1-5. Claim 18 adds that "the activator is hollow and is provided with an

and 9 is limiting. There is no doubt that the deformable ring 51 shown in Figures 8, 9, 9(a), and 9(b) is “ball-like,” but this does not necessarily indicate that “ball-like” is thereby *limited* to a deformable ring. We have repeatedly stated that it is inappropriate to construe claim terms as limited to preferred embodiments without a clear intent to redefine the term or a clear disavowal of claim scope. *See, e.g., Thorner v. Sony Comput. Entm’t Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012).

Relying on *In re Abbott Diabetes Care*, 696 F.3d 1142 (Fed. Cir. 2012), Schoeller argues that the ’397 patent manifests an implicit definition of “ball-like” as excluding a ball, and including only a ring that interacts in a particular way with the dart-like portion, namely by “forming a seal at the outer circumference of the cylindrical dart.” Appellant’s Br. 32. Schoeller argues that claim 17 requires a particular interaction between a “ball-like portion” and a “dart-like portion,” and that because those terms are only used in reference to the components in Figures 8, 9, 9(a), and 9(b), the claim must cover only that particular interaction between the elements.

Schoeller reads *Abbott* too broadly. In *Abbott*, the claims themselves suggested the exclusion of wires from the “electrochemical sensor” and the only discussion of wires in the specification of the patents at issue was to disparage their use in the prior art. *Abbott*, 696 F.3d at 1149. As we stated, “Abbott’s patents ‘repeatedly, consistently, and exclusively’ depict[ed] an electrochemical sensor without external cables or wires while simultaneously disparaging sensors with external cables or wires.” *Id.* at 1150 (quoting *Irdeto Access, Inc. v. Echostar Satellite Corp.*, 383 F.3d 1295, 1303 (Fed. Cir. 2004)). The same is not true of the instant ’397 patent, which does not disparage the use of a deformable ball as a “ball-like” portion.

the natural reading of “ball-like portion” as the genus of both a ball and a ring.

We also note that the ’397 patent repeatedly uses the phrase “ring” or “deformable ring” to refer specifically to element 51 in Figures 8, 9, 9(a), and 9(b). *See* ’397 patent, col. 10, ll. 23-25 (“The deformable activators 50, 50a, 50b disclosed herein effectively are a form of deformable dart, and having an external resilient ring”); *id.*, col. 10, ll. 27-28 (“[T]he deformable ring can shear under load”); *id.*, col. 10, ll. 30-31 (“The ring therefore forms a seal on the outer circumference of the dart”). If the patentee had wanted to limit the scope of claim 17 to those embodiments, the patentee had a narrow term readily available from the specification.

For these reasons, we affirm the Board’s construction of “ball-like portion” under the broadest reasonable construction standard as a “structure with at least one outer curve.”

Schoeller does not contest on appeal that claims 17 and 18 are anticipated by WO 02/14650 under the construction affirmed above. The Board’s decision of unpatentability of claims 17 and 18 is therefore affirmed on that basis. We need not and do not address the Board’s conclusions that Bourgoyne also anticipated claims 17 and 18, or that the combination of WO 02/14650 and Bourgoyne rendered obvious claims 17 and 18. Finally, we do not address the Board’s construction of “deformable,” which relates only to the Bourgoyne anticipation issue we do not reach.

AFFIRMED