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Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO. Includes details for application 14/913,944 and 112903 7590, listing inventor Todd Anthony Stair, attorney McAfee & Taft, and examiner QUAIM, LAMIA.

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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* TODD ANTHONY STAIR, NICHOLAS FREDERICK BUDLER,  
and PATRICK LYLE CHERNEY

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Appeal 2019-002370  
Application 14/913,944  
Technology Center 3600

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Before MICHAEL C. ASTORINO, KENNETH G. SCHOPFER, and  
TARA L. HUTCHINGS, *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 1–9, 15, and 16. We have jurisdiction  
under 35 U.S.C. § 6(b).

We REVERSE.

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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. 1.

## BACKGROUND

The Specification discloses that “[t]his invention relates generally to check valves and plug tools. This invention particularly relates to check valves and plug tools and apparatuses for use in oil and gas wellbores and methods for using the same.” Spec. ¶ 1.

## ILLUSTRATIVE CLAIM

Claim 1 is the only independent claim on appeal and recites:

1. A check valve comprising:
  - a magnetic plug having an outer surface, wherein said plug has a magnetic polarity which is the same polarity across said outer surface;
  - a magnetic seat, wherein said magnetic plug and magnetic seat operationally engage so as to have a magnetic resistivity such that said magnetic plug has a first position in which it is not sealingly engaged with said magnetic seat and second position where said magnetic plug is sealingly engaged with said magnetic seat.

Appeal Br. 25.

## REJECTIONS

1. The Examiner rejects claims 1–3 under 35 U.S.C. § 112(a)(1) as anticipated by Patterson.<sup>2</sup>
2. The Examiner rejects claim 4 under 35 U.S.C. § 103 as unpatentable over Patterson in view of Kyle.<sup>3</sup>

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<sup>2</sup> Patterson, US 3,468,338, iss. Sept. 23, 1969.

<sup>3</sup> Kyle et al., US 2013/0264051 A1, pub. Oct. 10, 2013.

3. The Examiner rejects claim 5 under 35 U.S.C. § 103 as unpatentable over Patterson in view of Kyle and Kasashima.<sup>4</sup>
4. The Examiner rejects claims 6 and 7 under 35 U.S.C. § 103 as unpatentable over Patterson in view of Berscheidt.<sup>5</sup>
5. The Examiner rejects claim 8 under 35 U.S.C. § 103 as unpatentable over Patterson in view of Berscheidt and Kyle.
6. The Examiner rejects claim 9 under 35 U.S.C. § 103 as unpatentable over Patterson in view of Berscheidt, Kyle, and Kasashima.
7. The Examiner rejects claim 15 under 35 U.S.C. § 103 as unpatentable over Patterson in view of Winters.<sup>6</sup>
8. The Examiner rejects claim 16 under 35 U.S.C. § 103 as unpatentable over Patterson in view of Berscheidt and Winters.

## DISCUSSION

### *Anticipation*

We are persuaded of reversible error by Appellant's arguments regarding the rejection of claim 1. *See* Appeal Br. 5–14. In particular, we agree that the Examiner has relied on an overly broad interpretation of the claim in finding that Patterson anticipates claim 1.

With respect to claim 1, the Examiner finds that Patterson discloses a check valve with a plug 50 and a seat 30 as claimed. Final Act. 4. More specifically, in relevant part, the Examiner finds that Patterson's plug has "the same polarity across at least half the outer surface of the plug." *Id.* (emphasis omitted). Thus, the Examiner indicates that the claim

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<sup>4</sup> Kasashima et al., US 6,200,232 B1, iss. Mar. 13, 2001.

<sup>5</sup> Berscheidt et al., US 6,491,116 B2, iss. Dec. 10, 2002.

<sup>6</sup> Winters, US 4,212,313, iss. July 15, 1980.

requirement that the “plug has a magnetic polarity which is the same polarity across said outer surface” reads on Patterson’s disclosure of a spherical plug that has the same polarity only on half of its outer surface. The Examiner explains that the term “across” is being interpreted to mean from one side to another. *Id.* at 2 (citing Dictionary.com). In an Advisory Action, the Examiner further explains that “the phrase ‘same polarity across said outer surface’ does not mean that the polarity is the same across the entire outer surface of the plug.” Advisory Act. 2 (mailed June 15, 2018). The Examiner finds that the term “across” can mean either “vertically across or horizontally across.” *Id.*

During examination, the scope of the claims in a patent application are interpreted 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). Here, we agree that the Examiner has interpreted the claims too broadly and that one of ordinary skill in the art would understand the term “across” as used in the context of the claim and Specification to mean “throughout.” *See* Appeal Br. 8 (citing Merriam-Webster Online Dictionary). This interpretation is supported by both the plain meaning of the claim language and the usage of the term in the Specification. Specifically, we agree with Appellant that one of ordinary skill in the art would recognize the phrase “across said outer surface” in the claim to include the entirety of the surface and not simply from side to side in one direction, as the Examiner’s interpretation implies. And this interpretation is supported by the Specification, which describes outer

surfaces of the spherical plug and seat that have the same polarity throughout the entirety of their outer surfaces, although the magnetic intensity across the surface may vary. *See, e.g.*, Spec. ¶ 20. We see no indication anywhere in the Specification that the use of “across” in the context of the plug and seat means that the polarity is merely the same over a portion of the surface.

Based on the foregoing, we agree with Appellant that Patterson does not disclose a magnetic plug that has a magnetic polarity across an outer surface, as required by claim 1. As the Examiner notes, Patterson teaches a spherical plug 50 that only includes the same polarity across a portion of its outer surface. *See* Patterson Fig. 4; *see also* Final Act. 4. Thus, Patterson does not disclose a magnetic plug as claimed. Accordingly, we do not sustain the rejection of claim 1 as anticipated by Patterson. For the same reasons we do not sustain the rejection of dependent claims 2 and 3.

*Obviousness*

The Examiner does not rely on the art of record in a manner that cures the deficiency in the rejection of claim 1, as discussed above. Accordingly, for the reasons discussed, we also do not sustain the obviousness rejections of dependent claims 4–9, 15, and 16.

CONCLUSION

We REVERSE the rejections of claims 1–9, 15, and 16.

In summary:

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
1–3	102(a)(1)	Patterson		1–3
4	103	Patterson, Kyle		4
5	103	Patterson, Kyle, Kasashima		5

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<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
6, 7	103	Patterson, Berscheidt		6, 7
8	103	Patterson, Berscheidt, Kyle		8
9	103	Patterson, Berscheidt, Kyle, Kasashima		9
15	103	Patterson, Winters		15
16	103	Patterson, Berscheidt, Winters		16
<b>Overall Outcome</b>				1-9, 15, 16

REVERSED