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SMITH IP SERVICES, P.C. P.O. Box 997 Rockwall, TX 75087			BOBISH, CHRISTOPHER S	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte KENNETH J. SCHMITT, CLARK E. ROBISON, ROBERT G.
MCDONALD, JAMES S. TRAPANI, and BENSON THOMAS

Appeal 2020-001636
Application 14/956,545
Technology Center 3700

Before MURRIEL E. CRAWFORD, BIBHU R. MOHANTY, and ROBERT
J. SILVERMAN, *Administrative Patent Judges*.

MOHANTY, *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 1–8 and 10–13. We have jurisdiction
under 35 U.S.C. § 6(b).

SUMMARY OF THE DECISION

We REVERSE.

¹ We use the word Appellant to refer to “applicant” as defined in 37 C.F.R.
§ 1.42(a). Appellant identifies the real party in interest as Weatherford
Technology Holdings, LLC and Amfields, LP (Appeal Br. 3).

CLAIMED SUBJECT MATTER

The Appellant's claimed invention relates to a hydraulic pumping system (Spec., page 1, lines 20–22). Claim 1, reproduced below, is representative of the subject matter on appeal.

1. A hydraulic pumping system for use with a subterranean well, the system comprising:
 - a hydraulic actuator including a piston that displaces in response to pressure in the actuator, a magnet that displaces with the piston, and at least one sensor that continuously detects a position of the magnet as the magnet displaces with the piston,
 - wherein a ferromagnetic wall of the hydraulic actuator is positioned between the magnet and the sensor.

THE REJECTIONS

The following rejections are before us for review:

1. Claims 1–3, 6–8, and 10–12 are rejected under 35 U.S.C. § 103 as unpatentable over Best (US 2014/0294603 A1, pub. Oct. 2, 2014), Sielemann (US 7,263,781 B2, iss. Sept. 4, 2007), and Hvilsted (US 4,846,048 iss. July 11, 1989).
2. Claim 13 rejected under 35 U.S.C. § 103 as unpatentable over Best, Sielemann, and Botts (US 4,102,394, iss. July 25, 1978).
3. Claims 4 and 5 are rejected under 35 U.S.C. § 103 as unpatentable over Best, Sielemann, and Beck (US 2004/0062657 A1, pub. April 1, 2004).

FINDINGS OF FACT

We have determined that the findings of fact in the Analysis section below are supported at least by a preponderance of the evidence².

ANALYSIS

The Appellant argues that the rejection of claim 1 would not have been obvious to one ordinary skill in the art (App. Br. 11–15, Reply Br. 11–16).

In contrast, the Examiner has determined that the cited claim limitation would have been obvious (Ans. 3–6).

We agree with the Appellant. We do agree with the Examiner’s determination that Best discloses a hydraulic actuator with a piston (8) and element 34 that detects a position of the element 34 as it displaced. We also agree with the Examiner’s position that Sielemann discloses a Hall-Effect sensor 32 detecting a position of the magnet. Sielemann at Figure 3 shows the sensors 32 spaced from one another which would not however be a “continuous” detection, but rather an “intermittent” detection. While Hall at col. 3 lines 41–57 discloses that response behavior can be “interpolated” and the resolution of the position-measuring effect of the piston improved, this interpolation between the 4 discrete sensors 32 does not appear to be continuous. The Examiner’s citation in the Answer to Hall at col. 4, lines 52–63 also fails to specifically disclose “continuous detection” in this manner. Thus it is not specifically disclosed that the Hall sensor of

² See *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Patent Office).

Sielemann operates to “continuously detect” a position of the magnet as claimed. Hvilsted at Figure 3 discloses a hydraulic cylinder with ferromagnetic material but not in spaced relation to the magnetic material 14 and 17. Here, the claim requires not only the at least one sensor “continuously detects” a position of the magnet but also that the “ferromagnetic wall of the hydraulic actuator is positioned between the magnet and sensor” in relation and combination with the other claimed elements. In *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007) the Supreme Court at 418 noted that in an obviousness analysis that “[r]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”. Here, the modification of the prior art to include the claimed elements in the specific relation to each other lacks articulated reasoning with rational underpinnings without impermissible hindsight and the rejection of record of claim 1 is not sustained. The remaining rejections of the claims fail to cure the deficiency in independent claim 1 and the rejection of these claims is not sustained.

CONCLUSIONS OF LAW

We conclude that Appellant has shown that the Examiner erred in rejecting Claims 1–3, 6–8, and 10–12 under 35 U.S.C. § 103 as unpatentable over Best, Sielemann, and Hvilsted.

We conclude that Appellant has shown that the Examiner erred in rejecting claim 13 rejected under 35 U.S.C. § 103 as unpatentable over Best, Sielemann, and Botts.

We conclude that Appellant has shown that the Examiner erred in rejecting claims 4 and 5 under 35 U.S.C. § 103 as unpatentable over Best, Sielemann, and Beck.

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1-3, 6-8, 10-12	103	Best, Sielemann, Hvilsted		1-3, 6-8, 10-12
13	103	Best, Sielemann, Botts		13
4, 5	103	Best, Sielemann, Beck		4, 5
Overall Outcome				1-8, 10-13

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).

REVERSED