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Baker Botts L.L.P. 910 Louisiana Street, One Shell Plaza Houston, TX 77002			WRIGHT, GIOVANNA COLLINS	
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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* KEITH E. HOLTZMAN, STUART MAXWELL JEFFRIES,  
PHILLIP FLOYD CLINGMAN, and JACK ASHBAUGH

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Appeal 2016-001992  
Application 14/057,905  
Technology Center 3600

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Before LYNNE H. BROWNE, LISA M. GUIJT, and ERIC C. JESCHKE,  
*Administrative Patent Judges.*

JESCHKE, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Keith E. Holtzman et al. (“Appellants”)<sup>1</sup> seek review under 35 U.S.C. § 134(a) of the Examiner’s decision, as set forth in the Final Office Action dated November 4, 2014 (“Final Act.”), rejecting claims 1–8 and 10–15 under 35 U.S.C. § 103(a) as unpatentable over Herrera (US 5,901,798, issued May 11, 1999) and Williams (US 3,893,778, issued July 8, 1975). We have jurisdiction under 35 U.S.C. § 6(b).

*We affirm.*

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<sup>1</sup> Appellants identify Halliburton Energy Services, Inc. as the real party in interest. Appeal Br. 3.

## BACKGROUND

The disclosed subject matter “generally relates to devices for tubulars in a well bore and, more particularly, to mechanical friction reduction devices for drilling tubulars in a well bore.” Spec. 1, ll. 7–8. Claims 1, 7, and 15 are independent. Claim 1 is reproduced below, with emphasis added:

1. A device to couple to a rotatable drill pipe to control pressure of a drilling system, the device comprising:

an inner surface to wrap around a portion of a rotatable drill pipe and having an inner diameter;  
and

a first tapered portion opposite a second tapered portion, with a middle portion therebetween comprising an outer diameter greater than the inner diameter;

wherein:

the first and second tapered portions each taper from the outer diameter to the inner diameter;

*the middle portion, the first tapered portion, and the second tapered portion form an outer surface to sealingly pass through a seal element of a controlled-pressure drilling system; and*

at least a portion of the outer surface corresponding to the middle portion comprises a low-friction material.

## DISCUSSION

Appellants argue the rejected claims as a group. Appeal Br. 4–6. We select claim 1 as the representative claim, with the remaining claims standing or falling with claim 1. 37 C.F.R. § 41.37(c)(1)(iv) (2014). For

claim 1, the Examiner relied on Herrera for certain limitations but stated that “Herrera does not disclose the first and second tapered portions each taper from the outer diameter to the inner diameter.” Final Act. 3. The Examiner found, however, that “Williams teaches (see fig. 1) a device (10) that has first and second portions (14a and 14b) that each taper from an outer diameter to an inner diameter” and that “Williams further states that the tapered ends help to deflect corrosive drilling mud away from the pipe extent that the device surrounds.” *Id.*; see Williams, col. 1, ll. 43–47, col. 1, l. 66 – col. 2, l. 7). According to the Examiner, it would have been obvious for one of ordinary skill in the art at the time of the invention “to modify the device disclosed by Herrera to have first and second tapered portions each taper from the outer diameter to the inner diameter in view of the teachings of Williams” because “it would be advantageous to deflect away corrosive drilling mud.” Final Act. 3.

First, Appellants argue that “the Examiner has failed to establish a prima facie case of obviousness” because “the Examiner has identified no disclosure in either *Herrera* or *Williams* of the ‘wherein . . . the middle portion, the first tapered portion, and the second tapered portion form an outer surface *to sealingly pass through a seal element of a controlled-pressure drilling system*’ limitation” of claim 1. Appeal Br. 5. According to Appellants, “the Examiner glossed over the limitation[] without providing any citation or any explanation as to how *Herrera* or *Williams* either alone or collectively disclose the limitation[].” *Id.*

The Examiner responds that “the combination of Herrera in view of Williams discloses a middle portion and first and second tapered portions to form an outer surface as recited in the claims” and “[a]s such, the

combination of Herrera in view of Williams discloses an outer surface that is inherently capable of sealingly passing through a seal element of a controlled-pressure drilling system since the combination of Herrera in view of Williams discloses the same structure as the claimed invention.” Ans. 3.

We are not apprised of error based on Appellants’ argument. In the Final Office Action, the Examiner made findings and set forth reasoning as to why the *structural* aspects of the limitation at issue—i.e., the “middle portion,” the “first tapered portion,” and the “second tapered portion”—would be present in the modified device. Final Act. 2–3. With the statements set forth above, the Examiner addressed the *functional* aspects of the limitation at issue to address the argument raised on appeal such that Appellants were able to respond.<sup>2</sup> See Ans. 3; see also *In re Jung*, 637 F.3d 1356, 1365 (Fed. Cir. 2011) (“It is well-established that the Board is free to affirm an examiner’s rejection so long as ‘appellants have had a fair opportunity to react to the thrust of the rejection.’”) (quoting *In re Kronig*, 539 F.2d 1300, 1302–03 (CCPA 1976)). In the Reply Brief, Appellants responded to the Examiner’s findings as to the functional aspects (as will be discussed below). Reply Br. 2.<sup>3</sup>

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<sup>2</sup> Appellants did not raise this argument in the Response to the only other office action in the record (i.e., the Non-Final Office Action preceding the Final Office Action on appeal). See Response to Non-Final Office Action Mailed June 17, 2014, at 6–7 (dated October 16, 2014).

<sup>3</sup> By filing a Reply Brief rather than filing a petition under 37 C.F.R. § 1.181, Appellants waived any argument that the Answer included a new ground of rejection. See *Manual of Patent Examining Procedure* § 1207.03(b) (9th ed., Rev. 07.2015, Nov. 2015) (discussing 37 C.F.R. § 41.40(a)).

Second, Appellants argue that “*Herrera* and *Williams* either alone or in combination do not disclose” the limitation at issue because “[n]either reference describes a controlled-pressure drilling system, or the ‘seal element of a controlled-pressure drilling system.’” Appeal Br. 5. Appellants state, “[i]ndeed, *Williams* does not even use the term ‘pressure.’” *Id.* In the Reply Brief, Appellants “disagree” with the Examiner’s inherency finding (set forth above), stating that “[t]he present specification describes numerous types of ‘seal elements’ associated with a controlled pressure drilling system through which the claimed device can sealingly pass through.” Reply Br. 2 (discussing Spec. 3, ll. 2–5). Appellants contend that neither *Herrera* nor *Williams* “contemplate a sealing engagement with an external sealing assembly, and the Examiner has not established it is necessarily true that the suggested combination would be suitable for that purpose.” *Id.*

Although the Specification does discuss various “sealing element[s]” (Spec. 3, ll. 2–5), we agree with the Examiner that, in claim 1, “Appellants do not positively recite a controlled-pressure drilling system or a seal element of a controlled-pressure drilling system.” Ans. 2. Thus, that the prior art does not disclose these aspects does not apprise us of error in the Rejection. We turn now to the inherency finding.

Features of a claimed apparatus may be recited either structurally or functionally. *In re Schreiber*, 128 F.3d 1473, 1478 (Fed. Cir. 1997). If the Patent Office has reason to believe that a functional limitation recited in an apparatus claim (such as claim 1) “may, in fact, be an inherent characteristic of the prior art, it possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the

characteristic relied on.” *In re Schreiber*, 128 F.3d 1473, 1478 (Fed. Cir. 1997) (quoting *In re Swinehart*, 439 F.2d 210, 213 (CCPA 1971)). We determine that the Examiner’s explanation (based on similarity of structure) supports a prima facie case that the “outer surface” of the modified device can inherently perform the function recited—i.e., “sealingly pass[ing] through a seal element of a controlled-pressure drilling system.” *See* Ans. 3. In response, Appellants discuss the absence of *explicit* teachings in the prior art, but have not provided evidence or technical reasoning to support their disagreement with the Examiner’s finding of inherency. *See Schreiber*, 128 F.3d at 1478.

For the reasons set forth above, we sustain the rejection of independent claim 1. Claims 2–8 and 10–15 fall with claim 1.

#### DECISION

We *affirm* the decision to reject claims 1–8 and 10–15 under 35 U.S.C. § 103(a).

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED