



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/705,549	05/06/2015	Jonathan Wesley Richardson	20040/56-12643	2408
34431	7590	11/19/2019	EXAMINER	
HANLEY, FLIGHT & ZIMMERMAN, LLC 150 S. WACKER DRIVE SUITE 2200 CHICAGO, IL 60606			FOX, JOHN C	
			ART UNIT	PAPER NUMBER
			3753	
			NOTIFICATION DATE	DELIVERY MODE
			11/19/2019	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jflight@hfzlaw.com
mailroom@hfzlaw.com
mhanley@hfzlaw.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JONATHAN WESLEY RICHARDSON and
JESSE CREIGHTON DOYLE

Appeal 2019-001793¹
Application 14/705,549
Technology Center 3700

BEFORE PHILLIP J. KAUFFMAN, JEREMY M. PLENZLER, and
ALYSSA A. FINAMORE, *Administrative Patent Judges*.

FINAMORE, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant² appeals from the Examiner's decision to reject claims 11–13, 15, 17–20, and 24–44. We have jurisdiction under § 6(b). We REVERSE.

¹ We reference herein the Specification filed May 6, 2015 (“Spec.”), Final Office Action mailed February 15, 2018 (“Final Act.”), Appeal Brief filed July 11, 2018 (“Appeal Br.”), Examiner’s Answer mailed October 30, 2018 (“Ans.”), and Reply Brief filed December 30, 2018 (“Reply Br.”).

² “Appellant” refers to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as Fisher Controls International LLC.
Appeal Br. 2.

SUBJECT MATTER ON APPEAL

The invention “relates generally to control valves and, more particularly, to [a] trim apparatus having multiple fluid flow control members.” Spec. ¶ 1. Claims 11, 19, and 43 are independent. Independent claim 11, reproduced below, is illustrative of the subject matter on appeal.

11. A valve trim apparatus for use with fluid valves, the valve trim apparatus comprising:

- a primary valve seat to be positioned in a fluid flow passageway defined by a valve body between an inlet and an outlet of the valve body;

- a first flow control member having a cavity and a first seating surface, the first flow control member movable relative to the primary valve seat between a closed position and an open position, the first seating surface to engage the primary valve seat to provide shut-off control and restrict fluid flow through the primary valve seat when the first flow control member is in the closed position, and the first seating surface to move away from the primary valve seat to allow fluid flow through the primary valve seat when the first flow control member is in the open position;

- a secondary valve seat positioned within the cavity of the first flow control member,

- a second flow control member positioned within the cavity of the first flow control member, the second flow control member being slidably coupled relative to the first flow control member, the second flow control member being movable between at least one of a first position, an intermediate position and a second position, the second flow control member to engage the secondary valve seat to prevent fluid flow through the passageway when the second flow control member is in the first position and the intermediate position, the second flow control member to move relative to the secondary valve seat between the intermediate position and the second position to throttle fluid through the passageway;

- a stem coupled to the second flow control member, the stem is to couple the second flow control member to an actuator

that is to move the second flow control member between the at least the first position, the intermediate position and the second position, the first flow control member to move between the closed position and the open position together with the second flow control member along at least a first portion of a stroke length of the actuator when the second flow control member moves between the first position and the intermediate position, the second flow control member to prevent fluid flow between the inlet and the outlet of the passageway when the first flow control member is in the open position and the second flow control member is between the first position and the intermediate position.

Appeal Br., Claims App.

REJECTIONS

The Examiner rejects the claims on appeal as follows:

claims 11–13, 15, 17–20, and 24–44 under 35 U.S.C. § 112(a) as failing to comply with the written description requirement;

claims 11–13, 15, 17–20, and 24–44 under 35 U.S.C. § 112(a) as failing to comply with the enablement requirement; and

claims 11–13, 15, 17–20, and 24–44 under 35 U.S.C. § 112(b) for failing to set forth the subject matter that the inventor regards as the invention.

ANALYSIS

Written Description

The Examiner finds there is no written description support for the intermediate position recited in independent claims 11, 19, and 43. Final Act. 2; Ans. 6. More specifically, the Examiner finds “[t]here is no written description of a second valve (member 208) that seals against fluid flow at

any position other than a first position engaged against seat 212, such as the claimed intermediate position.” Final Act. 2. According to the Examiner:

Appellant explains that the intermediate position is where shoulder 248 engages shoulder 250 to stop downward motion of member 206. In Figure 2 as filed June 24, 2015 and August 2, 2016 the shoulders are fixed with respect to each other and never engage. So there is clearly no original written description or enabling disclosure of an intermediate position, as explained by Appellant, for those Figures.

Ans. 6.

Appellant argues “[a] comparison of FIGS. 4-6 illustrates that the second flow control member 208 moves between a first position (FIG. 4), an intermediate position (FIG. 5), and an open position (FIG. 6).” Appeal Br. 24. Appellant also argues Figure 5 and paragraph 34 of the Specification describe the intermediate position as second flow control member 208 sealingly engaged with secondary valve seat 212. *Id.*; Reply Br. 11–13.

We agree with Appellant. Paragraphs 34–38 and Figure 5 describe valve member 100 being in intermediate position 500. In this position, first flow control member 206 moves away from primary valve seat 210 to open position 502 to enable fluid flow between inlet 104 and cavity 220 of first flow control member 206, while second flow control member 208 is in closed position 504 to prevent fluid flow between inlet 104 and outlet 106. Spec. ¶ 34, Fig. 5. As first flow control member 206 moves away from primary valve seat 210, gap 406 between shoulder 248 of first flow control member 206 and shoulder 250 of valve body 204 is reduced, and eventually shoulders 248, 250 engage. *Id.* ¶¶ 34, 36, Fig. 5. At least until shoulders 248, 250 engage, first and second flow control members 206, 208 close against one another due to fluid pressure acting on the first flow control

member and a reaction force imposed on the second flow control member by valve stem 260 and actuator 110. *Id.* ¶ 36, Fig. 5. Thus, in describing intermediate position 500 of valve assembly 100 whereby shoulders 248, 250 approach engagement, the Specification provides written description for the recited intermediate position of the second flow control member in which the second flow control member is engaged with the secondary valve seat to prevent flow through the passageway while the first flow control member is in an open position.

The Examiner further finds “there is no written description of how a first valve (control member 206) is opened,” as recited in independent claim 43. Final Act. 3. According to the Examiner, “the radial fluid pressure forces acting on valve member 206 provide no axial force to open the valve.” Ans. 4. The Examiner further explains:

Actuation of the valve is described in para [0035] as “ a control fluid is provided in the first chamber 308 (FIG. 3) of the actuator 110. This control fluid has a pressure that is greater than a pressure of a control fluid in the second chamber 310 to cause the sensing element 304 to move toward the second position 316”. (sensing element 304 is a piston and position 316 is fully open or fully downward) The operative word in this disclosure is move. That is, the stem goes from a condition of providing an upward closing force to a condition of moving downward.

There might be a very short, transient condition between when the upward force is removed and downward movement starts. It is theoretically possible for some small amount of fluid to move into the interface between surfaces 232 and 216 at that time and provide a very small opening force from a low fluid pressure. However, there is still a closing force from a high pressure acting on a larger or equal area at shoulder 248 that will be larger than the small, theoretical opening force.

Ans. 4–5.

We agree with Appellant that paragraph 35 provides written description for opening the first flow control member. Appeal Br. 25–28; Reply Br. 5–11. As explained in paragraph 35, to move first flow control member 206 away from primary valve seat 210 to open position 502, a control fluid is provided in first chamber 308 of actuator 110 to cause sensing element 304 to move from first position 312 to second position 316, thereby causing valve stem 260 and second flow control member 208 to move toward outlet 106. Spec. ¶ 35, Figs. 2–3. As second flow control member 208 moves toward outlet 106, the closing force provided to first flow control member 206 via the second flow control member 208 is removed. At this point, first flow control member 206 is free to disengage from primary valve seat 210. Once first flow control member 206 disengages from primary valve seat 210, pressurized fluid in inlet 104 causes first flow control member 206 to move toward outlet 106. *Id.* ¶ 35.

In view of the foregoing, the Examiner has not persuasively demonstrated a lack of written description for the intermediate position recited in independent claims 11, 19, and 43 and the opening of the first flow control member recited in independent claim 43. We, therefore, do not sustain the rejection of independent claims 11, 19, and 43 and claims 12, 13, 15, 17, 18, 20, 24–42, and 44 depending therefrom.

Enablement

The Examiner determines “[t]here is no enabling description of a second valve (member 208) that prevents fluid flow at any position other than a first position engaged against seat 212, such as the claimed intermediate position.” Final Act. 3. The Examiner also determines that

“there is no enabling disclosure of how flow control member 206 is opened.” *Id.* at 4. The Examiner applies the correct standard in analyzing whether the disputed subject matter is enabled, namely, by addressing the *Wands* factors as a means to determine whether undue experimentation would have been required to make or use the subject matter. *See* MPEP § 2164.01(a) (citing *In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988)). Nevertheless, the Examiner’s findings, and the weights given to individual *Wands* factors, are not persuasive.

The Examiner correctly finds that the claimed subject matter is in an old and well developed technology, and that there is a high level of predictability in the art. Final Act. 3–5. We disagree, however, with the Examiner that Appellant provides no guidance for making and using the claimed invention. *Id.* To the contrary, as Appellant points out, the Specification provides such guidance. Appeal Br. 28–35; Reply Br. 5–13. As set forth above, Figure 5 and paragraphs 34–38 describe the intermediate position of second flow control member 208. Moreover, paragraph 35 describes the opening of first flow control member 206.

Given the developed technology, high predictability in the art, and the description in the Specification, the Examiner has not shown persuasively that undue experimentation would have been required to make and use the claimed invention. Thus, we do not sustain the rejection of claims 11–13, 15, 17–20, and 24–44 for lack of enablement.

Subject Matter that the Inventor Regards as the Invention

The Examiner determines “[t]he claims are not an accurate description of the disclosed device.” Final Act. 6. Yet, in making this rejection, the

Examiner does not point to any disparity between the claims and the description in the Specification, or otherwise explain how the claims are not an accurate description of the disclosed device. To the extent the Examiner is relying on the rejections under 35 U.S.C. § 112(a) for failing to comply with the written description and enablement requirements to reject the claims under § 112(b), we do not sustain the Examiner’s rejections under § 112(a) for the reasons set forth above.

For these reasons, the Examiner has not persuasively established that the claims are not an accurate description of the disclosed device. Therefore, we do not sustain the rejection of claims 11–13, 15, 17–20, and 24–44.

CONCLUSION

Claim(s) Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
11–13, 15, 17–20, 24–44	112(a)	written description		11–13, 15, 17–20, 24–44
11–13, 15, 17–20, 24–44	112(a)	enablement		11–13, 15, 17–20, 24–44
11–13, 15, 17–20, 24–44	112(b)	subject matter which the inventor regards as the invention		11–13, 15, 17–20, 24–44
Overall Outcome				11–13, 15, 17–20, 24–44

REVERSED