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Leydig, Voit & Mayer, Ltd. (Frankfurt office) Two Prudential Plaza, Suite 4900 180 North Stetson Avenue Chicago, IL 60601-6731			CHAUDRY, ATIF H	
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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* DIETER FRANK, FRANK MEISSNER, and UWE STABENOW

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Appeal 2018-001631  
Application 13/994,248  
Technology Center 3700

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Before MICHELLE R. OSINSKI, JEREMY M. PLENZLER, and  
GEORGE R. HOSKINS, *Administrative Patent Judges*.

PLENZLER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant<sup>1</sup> appeals under 35 U.S.C. § 134(a) from the Examiner’s decision rejecting claims 1–7, 9, 13, 14, 17–19, and 22–27.<sup>2</sup> An oral hearing was held on September 10, 2019. A transcript is included in the record (“Transcript”). We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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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 WABCO Europe BVBA. Appeal Br. 1.

<sup>2</sup> Claims 8, 10–12, 15, 16, 20, and 21 are indicated as including allowable subject matter. Final Act. 12.

THE CLAIMED SUBJECT MATTER

Claim 1 is the sole independent claim on appeal, and is reproduced below.

1. A compressed air supply system for operating a pneumatic system of a vehicle, the compressed air supply system comprising:
  - a compressed air feed;
  - a compressed air port leading to the pneumatic system;
  - a vent port to the environment;
  - a main pneumatic line between the compressed air feed and the compressed air port, the main pneumatic line including:
    - an air dryer, and
    - a pilot-operated non-return valve having a control chamber divided into a control space and a venting space by one of a control piston and a seal on the control piston, wherein the pilot-operated non-return valve is configured to open automatically in a filling direction from the compressed air feed to the compressed air port and is further configured to be released to allow flow in a venting direction from the compressed air port to the compressed air feed; and
    - a vent line between the compressed air port and the vent port, the vent line comprising a vent valve.

REJECTION

References	Basis	Claims
Behmenburg, <sup>3</sup> Hennig, <sup>4</sup> and Kubik <sup>5</sup>	§ 103	1–7, 9, 13, 14, 17–19, and 22–27

OPINION

Appellant argues claims 1–7, 9, 13, 14, 17–19, and 22–27 as a group. Appeal Br. 3–9. We select claim 1 as representative. Claims 2–7, 9, 13, 14, 17–19, and 22–27 stand or fall with claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv).

The Examiner finds that Behmenburg teaches the majority of features recited in claim 1, including “a pilot operated non-return valve over-ride mechanism comprising a *separate* pilot operated valve 14 *across* non-return valve 6.” Final Act. 3–4 (emphasis added); *see* Behmenburg, Fig. 1. The Examiner finds Behmenburg’s separate over-ride mechanism 14 and non-return valve 6 differ from the claimed invention, “a pilot operated non-return valve,” which requires both functionalities to be performed by one device rather than separate devices. *Id.* at 4. The Examiner finds that Hennig teaches a pneumatic system having “a fluidically releasable non-return valve 328 in the form of a pilot operated non-return valve (from solenoid valve 318) as check valve over-ride mechanism (Para 23,25) for reverse flow across non-return valve.” *Id.* The Examiner proposes modifying Behmenburg’s separate valves to be a single valve based on the teachings from Hennig. *Id.* The Examiner reasons that such an arrangement

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<sup>3</sup> US 6,332,623 B1, issued Dec. 25, 2001.

<sup>4</sup> US 2013/0306192 A1, published Nov. 21, 2013.

<sup>5</sup> US 3,807,175, issued Apr. 30, 1974.

would have been obvious “in order to reduce number of assembly parts by eliminating the need for separate check valve by-pass valve.” *Id.* at 4–5. The Examiner cites Kubik as teaching the specific chambers for the “pilot-operated non-return valve” recited in claim 1, and proposes further modifying Behmenburg’s teachings accordingly. *Id.* at 5–6.

Appellant does not dispute the majority of the Examiner’s findings or rationale. Notably, Appellant does not dispute the Examiner’s findings regarding the teachings of Behmenburg, the Examiner’s findings regarding the teachings of Hennig, the Examiner’s findings regarding the teachings of Kubik, or the Examiner’s rationale for the further modifications based on Kubik’s teachings. Although Appellant disputes whether one skilled in the art would have modified Behmenburg’s teachings based on those of Hennig, Appellant never addresses the rationale provided by the Examiner for the proposed modification based on Hennig’s teachings (i.e., simplification based on reduction of parts). *See* Appeal Br. 7–8.

Appellant, instead, contends that “[t]he Office fails to articulate any reason why the teachings of Hennig would be relevant to modifying the level adjustment device of Behmenburg.” Appeal Br. 7. Appellant explains that “Hennig generally describes a tire management system (and not a level adjustment device for vehicles with air springs as described by Behmenburg) and specifically describes pilot check valves located in conduits between an outlet port of a regulator and individual tires” (*id.*), but this does not identify Examiner error. Appellant acknowledges that both Hennig and Behmenburg relate to pneumatic systems. *See id.* (“Hennig perform[s] a function in a tire management system—namely allowing air to flow into or out of tires” and Behmenburg describes an “air spring adjustment system.”). As the

Examiner explains, Hennig is cited simply to show that “combining the separate reverse flow path parallel to the check valve into a single pilot-operated check valve” was known at the time of the invention (Final Act. 13), which Appellant does not dispute. At the oral hearing, Appellant acknowledged that at the time of the invention, one skilled in the art would have understood the structure required by a “pilot-operated non-return valve” (i.e., combining a separate reverse flow path parallel to a check valve into a single pilot-operated check valve” was known at the time of the invention). *See* Transcript 3:4–5 (“I think a pilot-operated non-return valve is known to a person of skill in the art.”).

Appellant further alleges impermissible hindsight, but fails to offer any persuasive explanation as to why the Examiner’s reasoning for the proposed combination is based solely on Appellant’s disclosure. Appeal Br. 7. Appellant contends that “the Office ignores disclosure in the Behmenburg reference that indicates that it would not be suitable to replace the combination of valves and flow paths identified by the Office with a single valve.” *Id.* at 8 (citing Behmenburg 2:10–15). The cited portion of Behmenburg states that “[t]he advantages achieved with the invention are to be seen in particular in the fact that the air springs are emptied through a pneumatically controlled distribution valve arranged between the air springs and the air dryer to which large flow cross-sections can be conducted . . . [to allow] a rapid emptying of the air springs.” Behmenburg 2:10–15. As the Examiner explains, and Appellant does not dispute, “Behmenburg as modified would be able to open the pilot controlled check valve in [the] reverse direction to allow rapid emptying of the air springs (as shown by Kubik).” Final Act. 13.

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Because Appellant fails to apprise us of Examiner error, we sustain the Examiner's decision to reject claims 1–7, 9, 13, 14, 17–19, and 22–27.

#### DECISION

The Examiner's decision to reject claims 1–7, 9, 13, 14, 17–19, and 22–27 is AFFIRMED.

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).

AFFIRMED