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.
14/469,903	08/27/2014	THEODORE LIPA III	15491-033 (H07147 US)	1654

168384 7590 07/02/2020

Dickinson Wright PLLC - Ann Arbor
350 S. Main Street
Suite 300
Ann Arbor, MI 48104

EXAMINER	
KOSANOVIC, HELENA	

ART UNIT	PAPER NUMBER
3762	

NOTIFICATION DATE	DELIVERY MODE
07/02/2020	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):

DWPatents@dickinson-wright.com
tgarrett@dickinsonwright.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte THEODORE LIPA III

Appeal 2018-008388
Application 14/469,903
Technology Center 3700

Before JENNIFER D. BAHR, LEE L. STEPINA, and FREDERICK C. LANEY, *Administrative Patent Judges*.

LANEY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant[1] appeals under 35 U.S.C. § 134(a) from the Examiner's decision (dated January 11, 2018, hereinafter "Final Act.") rejecting claims 1 and 3–5[2] under 35 U.S.C. § 103(a) determining claims 1, 3, and 4 are unpatentable over Applicant Admitted Prior Art (Figure 3 in Appellant's Specification; hereinafter "AAPA") and Haupt (US 2008/0108293 A1, pub. May 8, 2008); and determining claim 5 is unpatentable over AAPA, Haupt,

---

[1] We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42. Appellant identifies MAHLE International GmbH as the real party in interest. Appeal Br. 2.

[2] Claim 2 has been canceled. Appeal Br. 13.

and Poitier (EP 0266230 A1, pub. May 4, 1988). We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

CLAIMED SUBJECT MATTER

The claims generally relate to "a HVAC module, and more particularly relates to a valve with a curved portion offset from an axis of the valve by an offset amount that determines proportions of air flowing on opposite sides of the valve." Spec. ¶ 1.

Claims 1 and 4 are independent. Claim 1 is reproduced below as illustrative of the claimed subject matter.

> 1. A heating, ventilation, and air-conditioning (HVAC) module adaptable to balance portions of air delivered by the module to distinct zones, said module comprising:
>
> a valve configured to rotate about an axis to variably restrict a delivery of incoming air to a first zone and a second zone, wherein the valve defines a curved portion characterized as curved about and offset from the axis by an offset amount, the curved portion forming a cavity between the axis and the curved portion, wherein an increase to the offset amount decreases a first portion of air delivered to the first zone relative to a second portion of air delivered to the second zone, wherein the valve has a closed state, in which the valve separates the incoming air from the first portion and from the second portion and in which both the first zone and the second zone are in communication with the cavity, and
>
> wherein rotation of the valve toward the closed state decreases both the first portion and the second portion.

Appeal Br. 13 (Claims App.).

OPINION

For independent claims 1 and 4, the Examiner relies on substantially the same evidence and reasoning to determine the claimed subject matter

would have been obvious in view of AAPA and Haupt. Final Act. 2–4. Appellant raises a dispositive issue regarding the Examiner's rationale for why a skilled artisan would have modified the valve 320 in Figure 3 of the AAPA in view of the temperature door 26 that Haupt discloses to arrive at the valve configuration claims 1 and 4 recite. Appeal Br. 5–8.[3] In particular, Appellant contends a deficiency exists in the Examiner's explanation for why a skilled artisan would have modified the valve of Figure 3 that controls the flow of air to multiple outlets with a temperature door that controls the mixture of cold and warm air. *Id.*; *see also* Reply Br. 2–4.

The Examiner finds that the AAPA generally discloses the recited structures of claims 1 and 4, except that it is "silent about the valve having [the recited] curved portion." Final Act. 3. The Examiner finds that Haupt teaches a valve 26 in Figure 1 that has a curved portion 38 characterized as curved about and offset from the axis 28 by an offset amount R, wherein an

[3] In the Appeal Brief, Appellant raises this issue in the context of claim 1 without specifically identifying that it applies also to claim 4. *See* Appeal Br. 5–8. In fact, Appellant raises a wholly separate argument of patentability for claim 4. *Id.* at 8–10. Nevertheless, the recited limitation at issue regarding claim 1 (i.e., "the valve defines a curved portion characterized as curved about and offset from the axis by an offset amount, the curved portion forming a cavity between the axis and the curved portion") is substantially the same as a similar limitation recited in claim 4. *See id.* 13, 14 (Claims App.). Moreover, the Examiner addressed this limitation found in both claims 1 and 4 together. Final Act. 3–4. Therefore, although Appellant does not identify specifically the fact that its patentability argument for claim 1 applies equally to claim 4, the Examiner has had an opportunity to address Appellant's argument regarding the same limitation in the context of claim 1. As a result, we view Appellant to be disputing the Examiner's rejection of claim 4 based also on the same ground raised in the context of claim 1.

increase to the offset amount decreases a first portion of path 58. *Id.* The Examiner "note[s] that when applied prior arts are combined, the H[a]upt curve of door will decrease the [AAPA] first portion of air compared to the second zone of air." *Id.* at 4. The Examiner determines,

> It would have been obvious to one of ordinary skill in the art at the time of the invention to have the [AAPA] . . . modified with the Haupt curved door in order to control the different amount of treated air to different zones and provide optimum cooling/heating where desired.
>
> Furthermore it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the [AAPA] . . . door with the Haupt curved door, because the substitution of one known element for another would have yielded predictable results of controlling air through the different openings in order to provide conditioned air where needed and thus provide comfort to the occupant inside the vehicle.

Id. at 4. The Examiner clarifies that the rejection "only applie[s] the curved door not the functioning of the H[a]upt [reference]" and the "AAPA in combination of the H[a]upt would teach the airflow, as claimed." *Id.* at 5.

Appellant contends that the Examiner's rationale is deficient because neither AAPA nor Haupt supports the Examiner's finding it was known to use the curved valve that Haupt discloses to restrict air flow and control the *amount of treated air allowed to flow to different zones*. Appeal Br. 6–7. Appellant argues, "[a]bsent the mixing function disclosed in the context of Haupt, there is no known reason to use the rotary valve of Haupt in the first place." *Id.* at 7. We agree.

The issue is whether the Examiner has shown with sufficiency that a skilled artisan would have known to modify the valve 322 shown in Figure 3 of AAPA, which opens to allow air to flow and closes to block the flow of

air, with that curved door of Haupt. As Appellant correctly notes, the only evidence in the record regarding the known uses for the curved door relates to temperature control and adjusting the composition of the warm and cold air upstream of a valve such as the one shown in AAPA. Appeal Br. 6–7. Although the record supports a finding that a skilled artisan would have known that modifying the valve 322 with the curved portion of the temperature door 26 would restrict the flow of air through the modified valve (*see* Haupt ¶ 38), the Examiner fails to show why a skilled artisan would have sought to restrict the flow of air to one of the zones valve 322 feeds when in the open position.

To the extent the Examiner identifies a reason, it lacks evidentiary support. In particular, the Examiner states that a skilled artisan would have made the modification "in order to control the different amount of treated air to different zones and provide optimum cooling/heating where desired," but there is no evidence that a skilled artisan knew modifying valve 322 with the curved door would optimize cooling/heating, nor is there any evidence that a skilled artisan knew *constricting* the flow of air to one zone versus another would improve cooling/heating in the different zones.

Moreover, the Examiner has not provided sufficient evidence that *constricting* the flow of air through valve 322 yielded the predictable result of providing conditioned air where needed or that skilled artisan recognized a problem with the amount of air valve 322 allowed to flow to the different zone. Absent the teachings from Appellant's Specification, there is no evidence in the record that shows a skilled artisan recognized a benefit of using valve 322 to restrict the flow of air when in the open state or, more generally, that restricting the flow of air to one zone versus another would

improve the flow of conditioned air to where it is needed. As a result, it appears the Examiner's reasoning was infected by impermissible hindsight.

In view of the foregoing, we are persuaded that Examiner's rejection of independent claims 1 and 4 was improper. The Examiner's reliance on Poitier does not cure the above deficiencies. Therefore, we do not sustain the Examiner's rejection of claims 1, 3–5.

CONCLUSION

The Examiner's rejections of claims 1 and 3–5 are reversed.

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	References	Affirmed	Reversed
1, 3–5	103(a)	AAPA, Haupt, Poitier		1, 3–5

REVERSED