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MACMILLAN, SOBANSKI & TODD, LLC - FORD
ONE MARITIME PLAZA - FIFTH FLOOR
720 WATER STREET
TOLEDO, OH 43604

EXAMINER

TOMPKINS, ALISSA JILL

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte CLAY W. MARANVILLE, CHRISTOPHER M. GREINER,
PAUL B. HOKE, MICHAEL E. HESSE, LAKHI GOENKA, and
JOHN C. SCHNEIDER

Appeal 2014-009796
Application 13/156,500¹
Technology Center 3700

Before CHARLES N. GREENHUT, JEREMY M. PLENZLER, and
PAUL J. KORNICZKY, *Administrative Patent Judges*.

PLENZLER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants seek our review under 35 U.S.C. § 134 of the Examiner's decision rejecting claims 1–24. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

¹ Appellants identify Ford Global Technologies, LLC and Halla Visteon Climate Control Corporation as the real parties-in-interest. App. Br. 1.

CLAIMED SUBJECT MATTER

Claims 1 and 16 are independent, with claims 2–15 and 17–24 depending from claim 1 or 16. Claim 1 is illustrative of the claims on appeal, and is reproduced below:

1. A heating, ventilating, air conditioning system for providing an airflow in a vehicle having a plurality of seating locations in a passenger cabin for respective passengers of the vehicle, comprising:

a plurality of outlet vents providing a shared outlet airflow to be distributed to the plurality of seating locations;

a plurality of suction returns disposed at various air return locations adjacent to the seating locations within the vehicle;

an air handling unit in fluid communication between the suction returns and the outlet vents;

a plurality of flow control elements each in series with at least one respective suction return for selectably modifying a respective flow of the respective suction return in response to a respective flow command so that a corresponding seating location receives a modified portion of the shared outlet airflow;

an occupancy determining apparatus for identifying one or more seating locations for receiving enhanced airflow; and

a controller for generating the respective flow commands in response to the identified seating locations.

REJECTIONS

1. Claims 1–10, 12–19, and 21–24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Inoue (US 5,450,894, iss. Sept. 19, 1995); and

2. Claims 11 and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Inoue and Esaki (US 7,828,050, iss. Nov. 9, 2010).

OPINION

The Examiner finds that the various embodiments of Inoue teach each limitation of claims 1 and 16 and proposes combining those teachings to arrive at the claimed arrangement. Final Act. 3–8. Claims 1 and 16 each require “an air handling unit in fluid communication between the suction returns and the outlet vents” *and* “a plurality of flow control elements each in series with at least one respective suction return for selectably modifying a respective flow of the respective suction return.”

With respect to the “air handling unit,” the Examiner notes that

Inoue teaches each seat zone has an air handling unit including a bottom duct, a blower fan, an evaporator and a heater; “Arranged ***in the bottom duct 62 is a blower fan 74, evaporator 78 and heater 80.*** The rotation of the fan 74 causes the air to be sucked into the duct 62 via the inlets 60, and is subjected to the heat exchange with the evaporator 78 and the heater 80 to obtain a desired temperature of the air.” Abstract, lines 6–11.

Final Act. 4 (emphasis added). Inoue includes 57 embodiments. *See, e.g.*, Inoue, 2:25–6:61. Based on the citation to the Abstract without further explanation, the exact embodiment to which the Examiner refers for this element is unclear. We at least know, however, that it is one that has the blower fan 74, evaporator 78, and heater 80 in *bottom* duct 62. As best we can tell, the Examiner appears to be referring to the first embodiment for this finding.

As for the “flow control elements,” the Examiner cites “the blower fans 74a and 74b” in Inoue’s 56th embodiment (Fig. 142). *Id.* at 5. The Examiner does not appear to propose modifying any particular embodiment from Inoue to meet the “air handling unit” and “flow control elements” recited in the claims. *See id.* at 6 (“Inoue’s teachings for its 56th

embodiment (Figs. 142 & 143) . . . includes the features of . . . its 1st embodiment (base embodiment) (Figs. 1–27)”). Rather, the Examiner proposes modifying Inoue’s 56th embodiment to have outlet vents having a shared outlet airflow, citing, for example, Inoue’s 44th embodiment for that teaching. *Id.* at 6–8.

Appellants respond, for example, that “[t]he rejection erroneously uses a single aspect/element of Inoue (blower fan) to allegedly disclose separate, distinct elements of the claims (air handling unit and flow control elements).” App. Br. 5. The Examiner does not address this argument directly, but when discussing Inoue’s 44th embodiment in the Answer, notes: **“an air handling unit in fluid communication between the suction returns and the outlet vents’** (Axial flow fan (663).” Ans. 4. The Examiner further notes that “[t]he seat-individualized embodiments of Inoue discuss in detail many advantages for including the recited **plurality of flow control elements** (*see e.g.*, Inoue, col. 55, lines 5–37, including electromagnetic flow control valves).” *Id.* at 5. The relevant portions of the Answer do not include any discussion, and do not even reference, blower fans 74, 74a, 74b. *See id.* 4–5. The 44th embodiment, which the Examiner cites in the Answer for the “air handling unit” limitation, was not cited for this limitation in the Final Action.

To the extent the Examiner relies on blower fans 74 in bottom duct 62 as meeting both the “air handling unit” and the “flow control elements” limitations, which is consistent with the Final Action (*see* Final Act. 4–5), we agree with Appellants that this is improper, as those elements are separately recited in the claims. To the extent the Examiner considers something else from the various embodiments of Inoue as meeting those

limitations, as evidenced by the citations in the Answer noted above (*see* Ans. 4–5), it is unclear to us how those portions of Inoue meet the limitations as well. For example, the portion of Inoue cited in the Answer with respect to the “flow control elements” discusses electromagnetic valves 820a, 820b. *See* Inoue, 55:5–37. Those valves, however, are part of Inoue’s evaporator system, not something that controls airflow. *See id.* at 54:54–56 (“on the conduits to the evaporators 78a and 78b, flow control electromagnetic valves 820a and 820b, respectively, are arranged”).

The rejections of the dependent claims do not remedy these deficiencies.

Accordingly, we do not sustain the Examiner’s decision to reject claims 1–24.

DECISION

We REVERSE the Examiner’s decision to reject claims 1–24.

REVERSED