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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MATS WALLIN, MARIO LONCAR,
CHRISTER AHLMÉN, and PÄR EMTELL

Appeal 2019-006325
Application 14/427,843
Technology Center 3700

Before JOHN C. KERINS, MICHAEL J. FITZPATRICK, and MICHELLE R. OSINSKI, *Administrative Patent Judges*.

FITZPATRICK, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant, Maquet Critical Care AB,[1] appeals under 35 U.S.C. § 134(a) from the Examiner's final decision rejecting claims 1–3, 6–8, 10–12, 15–17, 20, and 21. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

[1] "Appellant" refers to the applicant as defined in 37 C.F.R. § 1.42. Appellant identifies itself as the sole real party in interest. Appeal Br. 2.

STATEMENT OF THE CASE

The Specification

The Specification "pertains in general to the field of inhalational anesthesia systems," and more particularly, "to controlling oxygen delivered to a patient, who is fluidly connected to the system, in order to avoid hypoxia of the patient." Spec. 1:7–9.

The Claims

Claims 1–3, 6–8, 10–12, 15–17, 20, and 21 are rejected. Final Act. 1. Claims 4, 5, 9, 13, 14, and 18 are objected to. *Id.* No other claims are pending. *Id.* Claims 1, 10, and 20 are independent. Claim 1 is illustrative and reproduced below.

> 1. An anesthesia system, comprising:
>
> a unit providing a measured inspired oxygen value (FiO2) for oxygen delivered to a patient fluidly connected to said system; and
>
> a control unit triggering an alarm action in said system for an inspiratory oxygen alarm if said measured inspired oxygen value (FiO2) is below a first threshold value and above a second threshold value that is lower than the first threshold value; and wherein
>
> said control unit is configured to set said system to an operational safety mode for increasing delivery of oxygen to said patient, and wherein said control unit is configured to activate said operational safety mode if said measured inspired oxygen value (FiO2) is below the second threshold value.

Appeal Br. 15.

The Examiner's Rejections

The rejections before us, both pursuant to 35 U.S.C. § 103(a), are as follows:

1. claims 1, 2, 6–8, 10, 11, 15–17, 20, and 21 as unpatentable over Baker[2] and Raemer[3] (Final Act. 2[4]); and

2. claims 3 and 12 as unpatentable over Baker, Raemer, and Jamison[5] (*id.* at 6).

DISCUSSION

Rejection 1

Independent Claim 1

The Examiner found that Baker teaches the subject matter of claim 1 except for "the feature of 'a second threshold value that is lower than the first threshold value' with respect to the measured inspired oxygen value (FiO2)." Final Act. 3 (quoting claim 1). The Examiner found that Raemer teaches first and second thresholds and determined

> it would have been obvious to one having ordinary skill in the art to modify the anesthesia system of Baker to additionally the [sic] closed loop control system as taught by Raemer wherein the threshold values of the measured inspired oxygen value (FiO2) are correlated with the preferred fractional amounts of oxygen and the minimum desirable level of the preferred amounts of oxygen so that an alarm can be provided to the physician to ensure patient safety.

Id. at 5.

Of particular relevance to our Decision is the Examiner's finding that "Baker discloses . . . an operational safety mode ('safety feature' Paragraph 0048) for increasing delivery of oxygen ('controlling the amount of oxygen

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[2] EP 2 363 163 A1, published Sept. 7, 2011 ("Baker").
[3] US 5,365,922, issued Nov. 22, 1994 ("Raemer").
[4] The heading for this rejection omits claims 10 and 21, but the rejection clearly includes claims 10 and 21 per the Examiner's analysis and as acknowledged by Appellant. Final Act. 2; Appeal Br. 4.
[5] US 2010/0175695 A1, published July 15, 2010 ("Jamison").

let into the stream of breathing gas' Paragraph 0050) to said patient." *Id.* at 2–3 (quoting Baker ¶¶48, 50). Appellant argues, among other things, that "the enhanced safety feature of Baker does [not] meet the limitations of an operational safety mode as required by the recited claim." Appeal Br. 6.

Claim 1 recites "an operational safety mode for increasing delivery of oxygen to said patient, and wherein said control unit is configured to activate said operational safety mode if said measured inspired oxygen value (FiO2) is below the second threshold value."

Baker discloses:

> As another example, user interface 26 may be configured to accept user settings for high and low limits on FiO_2 of the breathing gas delivered to patient 10 that would prevent gas delivery control system 22 from adjusting FiO_2 of the breathing gas delivered to patient 10 beyond those limits. The teachings of the present disclosure may provide enhanced safety features in comparison to traditional controller for gas delivery systems (e.g., reducing the risk of hypoxia resulting from reduced FiO_2 of the breathing gas delivered to patient 10 and/or reducing the risk of oxygen toxicity resulting from excess FiO_2 of the breathing gas delivered to patient 10 over the long term). The teachings of the present disclosure may be used to control delivery of breathing gas to a patient based on any combination of ventilation parameters and may provide these or additional benefits.

Baker ¶48.

Appellant argues, per Baker's disclosure, "gas having FiO2 values below the defined lower limit is never delivered to the patient" because the measured FiO2 is prevented from falling below the low limit. Thus, "the enhanced safety feature could not be activated by such a condition," i.e., falling below the defined lower limit. Appeal Br. 7. The Examiner does not adequately rebut this argument. *See generally* Ans.

We agree with Appellant's reading of Baker's enhanced safety feature. That feature prevents FiO2 from falling below a threshold value; thus that feature consequently does not teach increasing oxygen delivery to a patient in response to FiO2 falling below that threshold.

For the foregoing reason, we reverse the rejection of claim 1.

Independent Claims 10 and 20

Claims 10 and 20 each recite "an operational safety mode" similar to that of claim 1. Appeal Br. 17 (claim 10), 18–19 (claim 20). The Examiner relies on the same findings for these claims as with respect to claim 1. Final Act. 2–5. Accordingly, for a similar reason as discussed above, we like reverse the rejections of claims 10 and 20.

Dependent Claims 2, 6–8, 11, 15–17, and 21

Each of claims 2, 6–8, 11, 15–17, and 21 ultimately depends from either claim 1 or claim 10. Accordingly, we reverse the rejection of claims 2, 6–8, 11, 15–17, and 21. *See In re Fine*, 837 F.2d 1071, 1076 (Fed. Cir. 1988) ("Dependent claims are nonobvious under section 103 if the independent claims from which they depend are nonobvious.").

Rejection 2

The Examiner rejected claims 3 and 12 over Baker, Raemer, and Jamison. Final Act. 6. Claims 3 and 12 depend from claims 1 and 10, respectively. The Examiner's application of Jamison in the rejection of claims 3 and 12 does not cure the deficiency in the rejection of claims 1 and 10. *See id.* at 6. Accordingly, we reverse the rejection of claims 3 and 12.

SUMMARY

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1, 2, 6–8, 10, 11, 15–17, 20, 21	103(a)	Baker, Raemer		1, 2, 6–8, 10, 11, 15–17, 20, 21
3, 12	103(a)	Baker, Raemer, Jamison		3, 12
Overall Outcome				1–3, 6–8, 10–12, 15–17, 20, 21

REVERSED