

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 25

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DIETRICH GRAVENSTEIN, NIKOLAUS GRAVENSTEIN,
RICHARD J. MELKER, SAMSUN LAMPOTANG and ANWER SULTAN

Appeal No. 1999-0283
Application No. 08/451,811

ON BRIEF¹

Before FRANKFORT, STAAB, and BAHR, Administrative Patent Judges.
BAHR, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 17-19, which are all of the claims pending in this application.²

¹ This appeal was set to be heard on April 7, 2000. However, as the appellants elected not to appear, thereby waiving the oral hearing, the appeal is decided on brief.

² We note that the preliminary amendment canceling claims 1-16 included on page 2 of the "REQUEST FOR APPLICATION UNDER 37 CFR § 1.60" filed May 26, 1995 has not been clerically entered, although the examiner acknowledges (Paper No. 2, examiner's action summary sheet) that claims 1-16 have been canceled. The
(continued...)

BACKGROUND

The appellants' invention relates to a method of intubating a patient with an endotracheal tube comprising directing electromagnetic or sound energy between and/or around the vocal cords of the patient, sensing the energy so transmitted and thereby locating the vocal cords of the patient, and routing the distal end of the endotracheal tube through the located vocal cords and correctly placing it in the trachea. As illustrated in Figure 3, this method is performed by transmitting energy (28) from a source (27) through a fiber optic cable (34) outside the patient's neck, the energy emitted from the distal end of the fiber optic cable (34) penetrating into the trachea below the vocal cords and traveling, at least in part, in the cephalad³ direction between the vocal cords and past the epiglottis (31). That energy is transmitted through an energy guide (10) disposed in an endotracheal tube situated with its distal end in the patient's pharynx and then through a fiber optic cable (16) and is then sensed by an energy sensor (14). The energy sensor transmits a signal in response to the energy sensed to a processing and steering system (15) which indicates in which direction the operator must advance the stylet system of the endotracheal tube to pass it between the vocal cords into the trachea. After the endotracheal tube has been passed into the trachea, the fiber optic cables

²(...continued)
examiner should take appropriate action to have that amendment clerically entered.

³ This is understood to denote a direction toward the patient's head (Webster's New World Dictionary, Third College Edition (Simon & Schuster, Inc. 1988)).

(16) and (34) can be reversed, as illustrated in Figure 7 and explained on page 23 of the appellants' specification, so that the energy source is connected, via the fiber optic cable (34) and energy guide (10), to the distal end of the endotracheal tube and the energy sensor (14) is connected via the fiber optic cable (16) to a point external of the patient's neck to sense energy emitted from the distal end of the endotracheal tube and thereby confirm the position of the distal end of the endotracheal tube.

The prior art reference of record relied upon by the examiner in rejecting the appealed claims is:

Heller

4,567,882

Feb. 4, 1986

The following rejection is before us for review.

Claims 17-19 stand rejected under 35 U.S.C. § 103 as being unpatentable over Heller.

Reference is made to the brief and reply brief (Papers No. 18 and 20) and the answer (Paper No. 19) for the respective positions of the appellants and the examiner with regard to the merits of this rejection.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art reference, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we cannot sustain the examiner's rejection.

The claims on appeal recite a method of intubating a patient with an endotracheal tube comprising the steps of directing energy substantially between and/or around the vocal cords, the energy having a direction, wavelength and intensity to be transmitted cephalad substantially between and/or around the vocal cords, sensing the energy transmitted between and/or around the vocal cords and thereby locating the vocal cords of the patient, and routing the distal end of the endotracheal tube through the located vocal cords.

Heller discloses a method for intubating a patient wherein light is transmitted via a fiber optic light conductor (15) along the length of the endotracheal tube (10) to an emitter (17) located at the distal end of the endotracheal tube. As explained in column 3, line 56, to column 4, line 5, the emitter redirects at least a substantial portion of the light transmitted thereto laterally with the result that point illumination occurs at the endotracheal tube's distal end. Some of the light "projected laterally and passing at generally right angles through the body wall of the patient" may be externally received or observed by the naked eye, thereby permitting a qualified medical attendant to determine and adjust, if necessary, the position of the tube.

Heller does not disclose a method as claimed by the appellants wherein energy having a direction, wavelength and intensity to be transmitted cephalad substantially between and/or around the vocal cords is sensed and the vocal cords of the patient are thereby located. Rather, in the Heller method, the medical attendant observes light transmitted away from the head

through the endotracheal tube and then substantially at right angles through the body wall (neck) of the patient and thus locates the distal end of the endotracheal tube, not the vocal cords.

For the foregoing reasons, we do not agree with the examiner (answer, pages 7 and 8) that the method defined by any of claims 17-19 is "readable upon"⁴ the Heller method. Further, as the examiner has not advanced any rationale as to why it would have been obvious to one of ordinary skill in the art to modify the Heller method to overcome the above-noted deficiency of Heller to arrive at the claimed invention, we shall not sustain the examiner's rejection.

⁴ Anticipation requires that the claim read on something disclosed in the reference, i.e., that all of the limitations in the claim be found in or fully met by the reference. Kalman v. Kimberly Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984).

CONCLUSION

To summarize, the decision of the examiner to reject claims 17-19 under 35 U.S.C. §
103 is reversed.

REVERSED

CHARLES E. FRANKFORT)	
Administrative Patent Judge)	
)	
)	
)	
)	BOARD OF PATENT
LAWRENCE J. STAAB)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
)	
JENNIFER D. BAHR)	
Administrative Patent Judge)	

Appeal No. 1999-0283
Application No. 08/451,811

Page 7

Appeal No. 1999-0283
Application No. 08/451,811

Page 8

Dennis P. Clarke
Kerkam, Stowell, Kondracki and Clarke
Two Skyline Place, Suite 600
5203 Leesburg Pike
Falls Church, VA 22041-3401