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Gravenstein et al.

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[54] **TRANSTRACHEAL ENERGY APPLICATION AND SENSING SYSTEM FOR INTUBATION: METHOD AND APPARATUS**

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[57] ABSTRACT

[21] Appl. No.: **319,543**

An intubation scope assembly adapted to facilitate the positioning of an endotracheal tube in a patient comprising an electromagnetic or sound energy source which enters the vocal cords exteriorly of the neck of the patient with energy having a direction, wavelength and intensity capable of entering the trachea, substantially avoiding encompassing the entire pharynx and capable of being transmitted cephalad substantially between and/or around the vocal cords. A suitable sensor for the energy emitted by such source comprises a stylet assembly, the distal end of which can detect or collect the energy transmitted between and/or around the vocal cords and the proximal end of which can monitor the detected or collected energy to thereby locate the vocal cords for positioning an endotracheal tube therebetween. A system and method of intubating a patient with the foregoing assembly are also disclosed.

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[51] Int. Cl.⁶ **A61M 16/04**

[52] U.S. Cl. **128/200.26; 128/205.23; 128/207.14; 128/207.15**

[58] Field of Search **128/200.26, 205.23, 128/207.14, 207.15**

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16 Claims, 4 Drawing Sheets

