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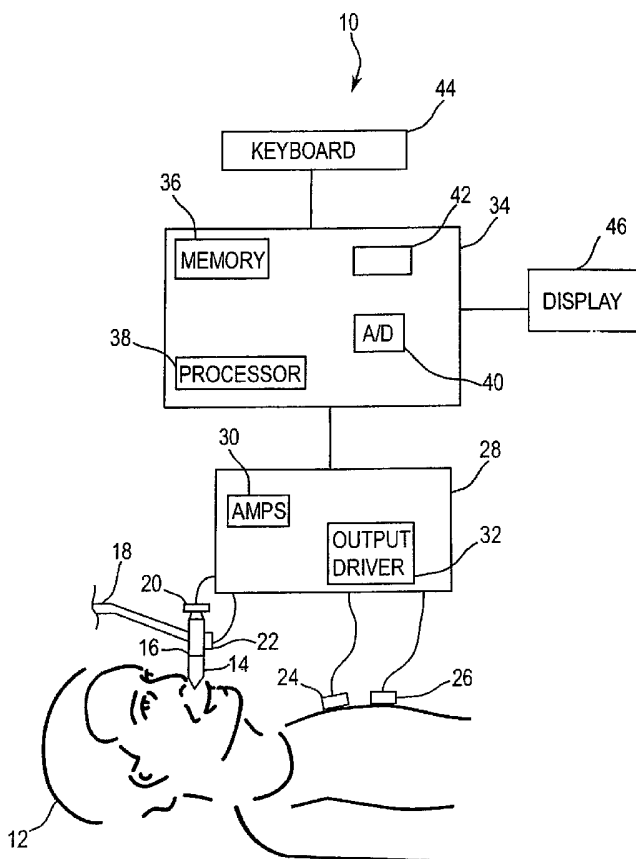
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[Continued on next page]

(54) Title: ACOUSTIC DETECTION OF ENDOTRACHEAL TUBE LOCATION



(57) Abstract: A system and method for use in detecting an endotracheal tube (14) location within a body electronically detects indigenous breath sounds emanating from a region of the body and processes the detected indigenous breath sounds to generate a parameter representative of an acoustic characteristic of the body associated with the endotracheal tube (14) location within the body. The system and method generates an output indicative of the endotracheal tube (14) location within the body based on the parameter representative of the acoustic characteristic of the body. The system includes an acoustic sensor (22, 24, 26), a processing unit (34), and an output device (46).

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US03/20674

A. CLASSIFICATION OF SUBJECT MATTER
 IPC(7) : A61B 7/00
 US CL : 600/586
 According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
 Minimum documentation searched (classification system followed by classification symbols)
 U.S. : 600/424, 437, 438, 529, 531, 532, 533, 534, 535, 538, 552, 553, 586, 587

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| A,P | US 6,443,907 B1 (MANSY et al) 03 September 2002, see entire document. | 1-46 |
| A | US 6,349,720 B1 (CLARK) 26 February 2002, see entire document. | 1-46 |
| A | US 6,261,238 B1 (GAVRIELY) 17 July 2001, see entire document. | 1-46 |
| A | US 5,655,518 A (BURDEN) 12 August 1997, see entire document. | 1-46 |
| A | US 5,056,514 A (DUPONT) 15 October 1991, see entire document. | 1-46 |

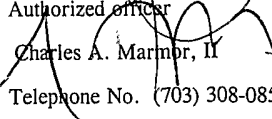
Further documents are listed in the continuation of Box C. See patent family annex.

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INTERNATIONAL SEARCH REPORT

PCT/US03/20674

Continuation of B. FIELDS SEARCHED Item 3:

EAST

search terms: endotracheal tube, breath, breathing, respiration, sounds, acoustic, detect, placement, position, location, sense, determine, acoustic sensor, processor, chest