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(54) Title: METHOD AND APPARATUS FOR EXAMINING SUBJECTS FOR PARTICULAR PHYSIOLOGICAL CONDITIONS UTILIZING ACOUSTIC INFORMATION

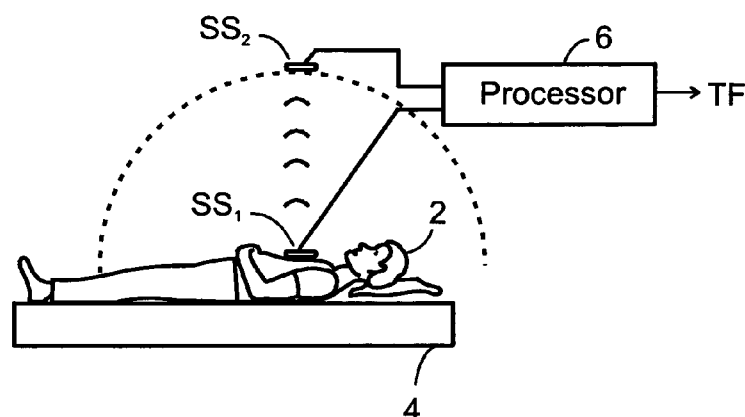


FIG. 1

(57) Abstract: A method and apparatus for examining a subject for a particular physiological condition according to a technique which utilizes sounds generated by the subject and sensed at a predefined distance from the site of sound generation of the subject, by locating a first sound sensor, e.g., a sound level meter which measures the sound levels in decibels, on a particular region of the subject's body to produce an output corresponding to the sound level sensed thereby; modifying the output of the first sound level meter by a pre-calculated Transfer Function equating its output to that of a second sound level meter located at a predefined distance from the site of sound generation of the subject's body; and utilizing the modified output of the first sound level meter in determining the existence of the particular physiological condition.



INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL 09/00528

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A61B 5/00 (2009.01)

USPC - 600/300

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)
USPC - 600/300; IPC - A61B 5/00 (2009.01)Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC - 181/0.5, 126, 127, 131, 137; 600/300, 301, 438, 493, 513, 528, 529, 532, 561, 586, 587 (Text limited search, see terms below)Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PubWEST(USPT,PGPB,EPAB,JPAB); Google Scholar TERMS acoustic sound motion position output attach sensor microphone transducer pickup distance "transfer function" ambient noise reference generat\$3 joint gastrointestinal GI borborygmus motion moving movement pre-calibrat\$3 calibrat\$3 information physiolog\$4 condition subject body separation second

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,853,005 A (Scanlon) 29 December 1998 (29.12.1998) col 6, ln 22-26, col 7, ln 6-7, col 9,	1, 2, 4, 16, 17
--	ln 38-40, col 10 ln 62-66, col 11, ln 6, 53-55, col 12, ln 13-18, 24-28	--
Y		3, 5-15, 18-22
Y	US 2003/0100843 A1 (Hoffman) 29 May 2003 (29.05.2003) para [0015], [0092], [0122], [0130]	3, 15, 22
Y	US 6,213,955 B1 (Karakasoglu et al.) 10 April 2001 (10.04.2001) col 5, ln 45-47, col 5, ln 55-col 6, ln 6, col 6, ln 18-23, 30-33, 54-57	5-10, 15
Y	US 2004/0039295 A1 (Olbrich et al.) 26 February 2004 (26.02.2004) para [0053], [0059]	11-14
Y	US 2006/0064037 A1 (Shalon et al.) 23 March 2006 (23.03.2006) para [0016], [0025], [0030], [0112], [0138], [0332], [0348], [0337], [0361]	9, 10, 15, 18, 19, 21
Y	US 2006/0037615 A1 (Wilkinson et al.) 23 February 2006 (23.02.2006) para [0057], [0058], [0060], [0073], [0135]	20, 21

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