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#### **Declaration under Rule 4.17:**

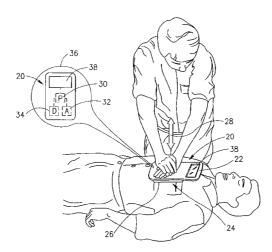
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### (54) Title: MONITORED CARDIOPULMONARY RESUSCITATION DEVICE



(57) Abstract: A method for determining displacement of a region of a patient's chest to which force is applied so as to cyclically compress and decompress the chest and administer thereby CPR to the patient comprising determining displacement of the chest region by double integrating over time acceleration of the chest region and correcting integration constants using information independent of the integration. The method comprises: a) determining an integration time period; b) determining an initial displacement and velocity; c) measuring acceleration during the time period; d) calculating chest displacement for the period by double integrating the acceleration over time, using the initial displacement and velocity as constants of the integration; e) determining a first difference between displacements at first and second times using one of the calculated displacements; f) determining a second difference independent of the calculated displacements; g) determining a third difference equal to a difference between the first and second displacements; h) repeating a) through g) for a next integration time period and adjusting one of initial velocity and/or acceleration measurements responsive to the third difference.



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### INTERNATIONAL SEARCH REPORT

Int ial Application No PCI/IL 01/00785

CLASSIFICATION OF SUBJECT MATTER IPC 7 G01L5/00 G01P7/00 A61H31/00 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) IPC 7 A61H A61N GO1P GOIL 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 practical, search terms used) EPO-Internal, PAJ, WPI Data C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No P,X EP 1 057 451 A (LAERDAL MEDICAL AS) 32 6 December 2000 (2000-12-06) the whole document 1 Α 32 WO OO 27464 A (EMERGENCY MEDICAL SYSTEMS X INC) 18 May 2000 (2000-05-18) the whole document 1 WO 99 25306 A (LAMISH AHARON ; CPR DEVICES 1,32 Α LTD (IL); LASS YORAM (IL)) 27 May 1999 (1999-05-27) the whole document US 5 991 661 A (BRADLEY KERRY ET AL) 1,32 Α 23 November 1999 (1999-11-23) the whole document Further documents are listed in the continuation of box C. Patent family members are listed in annex. X Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the \*A\* document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention filing date cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or document is combined with one or more other such docu ments, such combination being obvious to a person skilled other means in the art. document published prior to the international filing date but later than the priority date claimed \*&\* document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 28/05/2002 21 May 2002 Name and mailing address of the ISA Authorized officer

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C (Continue	tion) DOCUMENTS CONSIDERED TO BE RELEVANT	<u> </u>
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