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(54) **System and method for the automatic evaluation of the indexes of volemic status**

(57) The present invention refers to a system and a method for the automatic evaluation of the indexes of volemic status (Systolic Pressure Variation or SPV) in patients submitted to mechanic ventilation, starting from the analysis of the variations of the values of blood pressure.

In one embodiment the system for the automatic evaluation of indexes of volemic status of a patient (1) comprises: means (7) suitable for submitting said pa-

tient to a preset period of apnoea and to a preset period of mechanical breathing; heart pressure probes (2) for acquiring an analogical signal relative to the values of the blood pressure of said patient in said preset periods; an analogue/digital converter (3) for the conversion of said analogical signals into a digital signal; means (5) for determining the values of positive systolic peaks of said pressure; means (5) for calculating first and second indexes of volemic status; a display (6) of said indexes of volemic status.

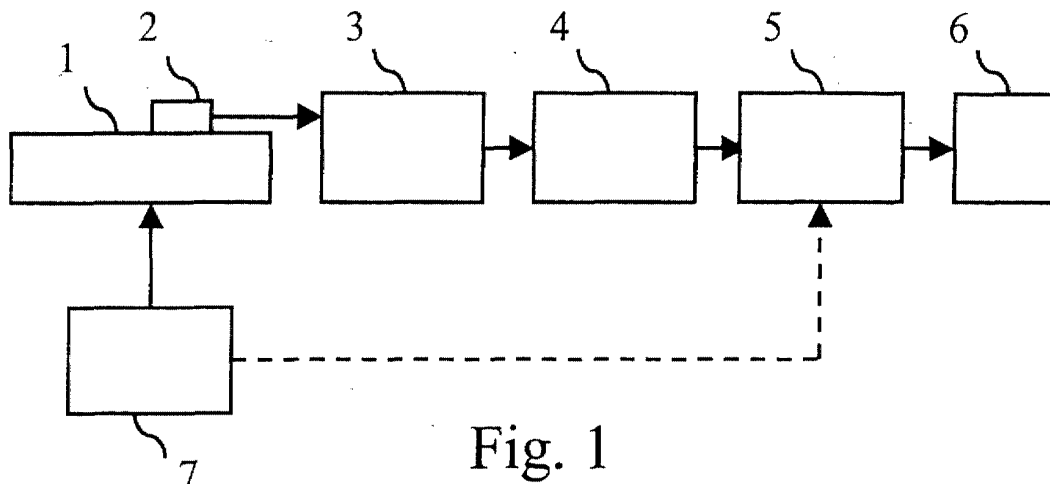


Fig. 1



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 01 20 1744

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
Y	<p>PIZOV R ET AL: "The arterial pressure waveform during acute ventricular failure and synchronized external chest compression." ANESTHESIA AND ANALGESIA. UNITED STATES FEB 1989, vol. 68, no. 2, February 1989 (1989-02), pages 150-156, XP002205590 ISSN: 0003-2999 * page 150, col 2, row 2, lines 8-15 * * page 153; figures 2,4 * * section "Methods" *</p>	1-3	A61B5/021
Y	<p>PREISMAN S ET AL: "New monitors of intravascular volume: a comparison of arterial pressure waveform analysis and the intrathoracic blood volume." INTENSIVE CARE MEDICINE. UNITED STATES JUN 1997, vol. 23, no. 6, June 1997 (1997-06), pages 651-657, XP002205589 ISSN: 0342-4642 * "Materials and methods" paragraph 3 lines 1-2 and paragraph 4 *</p>	1-3	
The present search report has been drawn up for all claims			<p>TECHNICAL FIELDS SEARCHED (Int.Cl.7)</p> <p>A61B A61M</p>
Place of search		Date of completion of the search	Examiner
MUNICH		19 July 2002	Edward, V
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>& : member of the same patent family, corresponding document</p>			

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专利名称(译)	用于自动评估病态状态指标的系统和方法		
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摘要(译)

本发明涉及一种用于自动评估接受机械通气的患者的血容量状态指数(收缩压变化或SPV)的系统和方法,从血压值变化的分析开始。在一个实施例中,用于自动评估患者(1)的病征状态指标的系统包括:适于将所述患者提交到预设的呼吸暂停时段和预设的机械呼吸时段的装置(7);心脏压力探针(2),用于在所述预设时间段内获取与所述患者的血压值相关的类比信号;模拟/数字转换器(3),用于将所述模拟信号转换成数字信号;装置(5)用于确定所述压力的正收缩峰值;是指(5)用于计算田鼠状态的第一和第二指标;所述视神经状态指标的显示(6)。

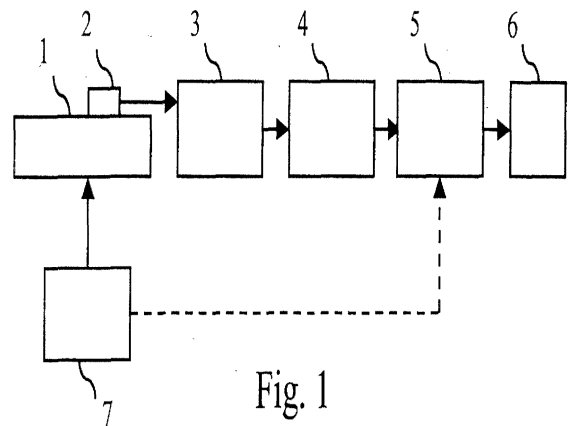


Fig. 1