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(54) **Dual-mode pulse oximeter**

(57) A pulse oximeter (210) has an integrated mode in which it operates as a plug-in module for a multiparameter patient monitoring system (MPMS) (250). The pulse oximeter (210) also has a portable mode in which it operates separately from the MPMS (250) as a battery-powered handheld or standalone instrument. The pulse oximeter (210) has a sensor port that receives a photoplethysmographic signal as input to an internal processor. The pulse oximeter processes this sensor signal to derive oxygen saturation and pulse rate measurements. In the portable mode, this information is provided on its display (340), and stored in memory for trend capability. A keypad (510) provides a user interface for operational control in the portable mode.; In the integrated mode, the pulse oximeter provides oxygen saturation and pulse rate measurements to the MPMS (250) through a communi-

cations interface, along with previously stored trend data, and displayed on the MPMS monitor. The MPMS (250) also provides external power and operational control of the pulse oximeter (210) in the integrated mode. Alternatively, a docking station (660) operates as a plug-in module that provides the mechanical and electrical interface between a portable pulse oximeter (610) and MPMS instruments from a variety of manufacturers. In the integrated mode, the portable pulse oximeter (610) docks to the docking station (660), which in turn is inserted in one or more MPMS slots (290). The docking station (660) can function as a simple electrical pass-through device between the docked portable pulse oximeter (610) and the MPMS (250) or it can provide a MPMS communications interface.

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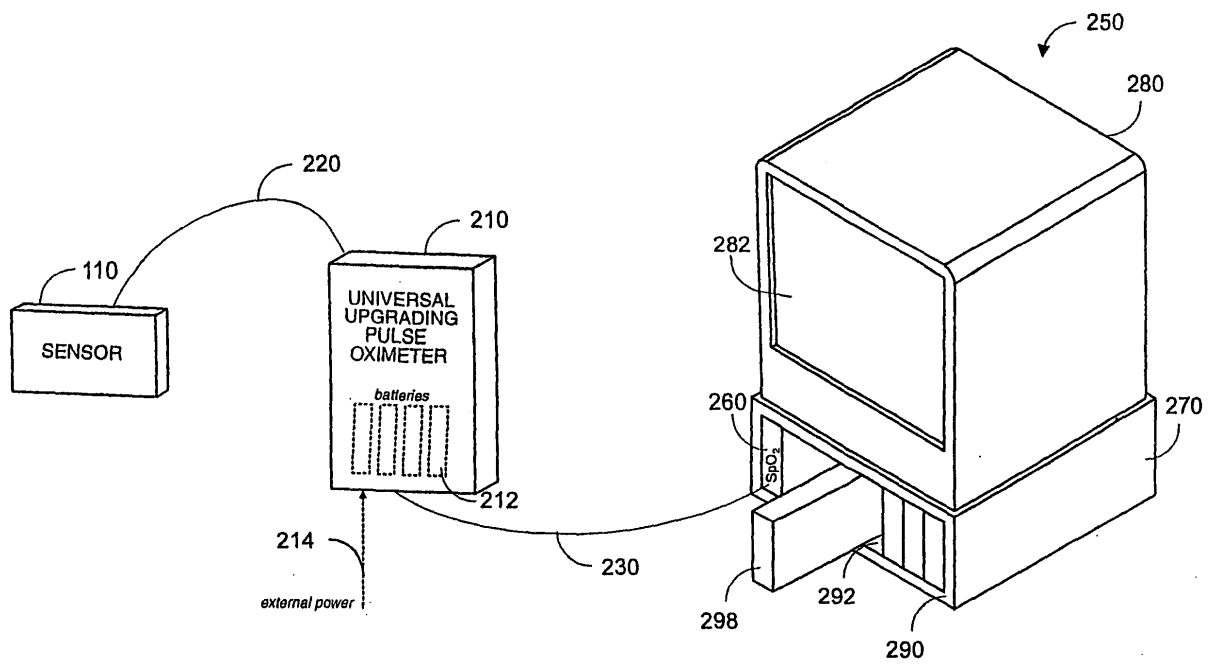


FIG. 2



EUROPEAN SEARCH REPORT

Application Number
EP 09 00 2646

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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 9 November 2010	Examiner Kempin, H
CATEGORY OF CITED DOCUMENTS 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 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 & : member of the same patent family, corresponding document			

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EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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The members are as contained in the European Patent Office EDP file on
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专利名称(译)	双模式脉搏血氧仪		
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IPC分类号	A61B5/00		
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代理机构(译)	法思博事务所		
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其他公开文献	EP2064989A2 EP2064989B1		
外部链接	Espacenet		

摘要(译)

脉冲血氧计 (210) 具有集成模式, 其中其作为用于多参数患者监测系统 (MPMS) (250) 的插入模块操作。脉冲血氧计 (210) 还具有便携模式, 其中作为电池供电的手持式或独立式仪器与MPMS (250) 分开操作。脉冲血氧计 (210) 具有传感器端口, 其接收光 - 体积描记信号作为内部处理器的输入。脉冲血氧计处理该传感器信号以获得氧饱和度和脉搏率测量值。在便携式模式中, 该信息在其显示器 (340) 上提供, 并存储在存储器中以用于趋势能力。键盘 (510) 提供用于便携式模式下的操作控制的用户界面。在集成模式中, 脉搏血氧仪提供氧饱和度和脉搏率通过通信接口与MPMS (250) 一起测量, 以及先前存储的趋势数据, 并显示在MPMS监视器上。MPMS (250) 还在集成模式下提供脉冲血氧计 (210) 的外部电源和操作控制。或者, 对接站 (660) 作为插入式模块操作, 该插入式模块在便携式脉冲血氧计 (610) 和来自各种制造商的MPMS仪器之间提供机械和电气接口。在集成模

式中，便携式脉搏血氧计（610）对接到对接站（660），对接站（660）又插入一个或多个MPMS插槽（290）中。对接站（660）可以用作对接的便携式脉搏血氧计（610）和MPMS（250）之间的简单电通道装置，或者它可以提供MPMS通信。接口。

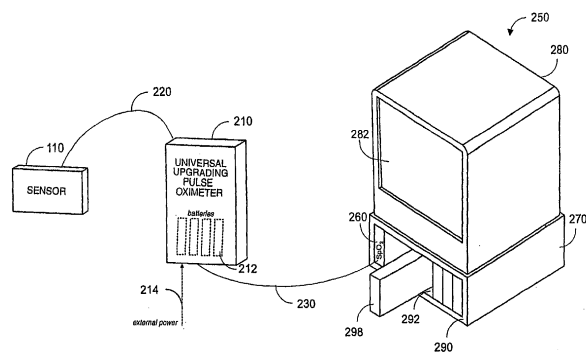


FIG. 2