



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
15.10.2003 Bulletin 2003/42

(51) Int Cl.⁷: **A61B 5/00**, A61B 5/055

(43) Date of publication A2:
17.07.2002 Bulletin 2002/29

(21) Application number: **01310925.1**

(22) Date of filing: **28.12.2001**

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE TR
 Designated Extension States:
AL LT LV MK RO SI

(72) Inventor: **Parker, Brent**
Murietta, CA 92563 (US)

(74) Representative: **Jones, Graham H.**
Graham Jones & Company
Blackheath
77 Beaconsfield Road
London SE3 7LG (GB)

(30) Priority: **11.01.2001 US 758038**

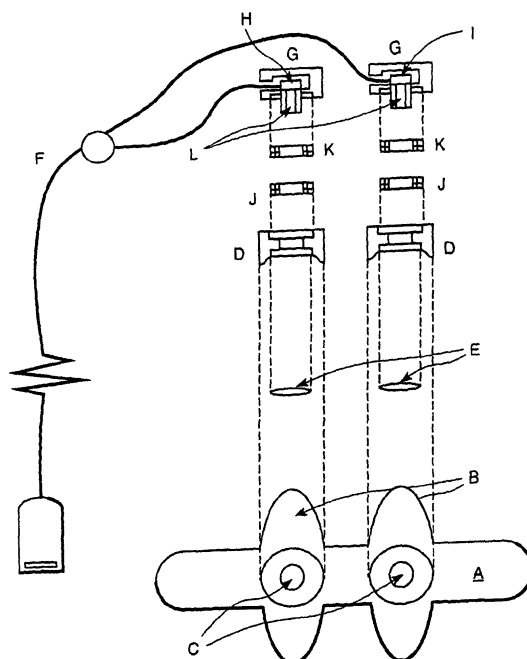
(71) Applicant: **SENSIDYNE, INC.**
Clearwater, FL 33760 (US)

(54) **Reusable pulse oximeter probe and disposable bandage method**

(57) A method of facilitating the intra-departmental or inter-institutional transport of a patient or patients requiring the pulse oximeter monitoring, and wherein the pulse oximeters used for monitoring the patient may be of different manufacturers, comprising affixing to the patient a bandage apparatus having a modular emitter and

detector receptacles incorporated thereon. Each different manufacturers' pulse oximeter probe is provided with modular housings adapted to matedly engage and/or disengage the receptacles of the disposable bandage apparatus, thus enabling the patient to be monitored by pulse oximeters of different manufacturers without changing the bandage apparatus.

FIGURE 1





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 01 31 0925

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)
X, D	WO 00 21433 A (SENSIDYNE) 20 April 2000 (2000-04-20)	1	A61B5/00 A61B5/055
Y	* the whole document *	2	
X	US 5 273 041 A (RICHARDS KARL T ET AL) 28 December 1993 (1993-12-28) * column 2, line 26 - line 68 * * column 4, line 39 - line 55 * * figures 3-5 *	2	
Y	US 5 786 592 A (HOEK BERTIL) 28 July 1998 (1998-07-28) * abstract * * column 1, line 37 - line 63 *	2	
Y	US 5 279 295 A (MARTENS GERHARD ET AL) 18 January 1994 (1994-01-18) * abstract * * column 2, line 31 - line 39 *	2	
Y	WO 92 21281 A (SUSI ROGER E) 10 December 1992 (1992-12-10) * abstract *	2	TECHNICAL FIELDS SEARCHED (Int.Cl.7) A61B
A	US 5 910 108 A (SOLENERGER STEPHEN D) 8 June 1999 (1999-06-08) * column 2, line 1 - line 33 *	1	
A	US 5 437 275 A (AMUNDSEN NEIL T ET AL) 1 August 1995 (1995-08-01) * abstract *	1	
A	US 5 991 648 A (LEVIN PAUL) 23 November 1999 (1999-11-23) * abstract; figures 4,8 *	1	
-/--			
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 8 August 2003	Examiner Abraham, 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 & : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03.82 (P04C01)



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 01 31 0925

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)
A	WO 00 42911 A (MASIMO CORP) 27 July 2000 (2000-07-27) * page 2, line 34 - page 3, line 4 *	1	
A	US 5 664 270 A (BELL GLENN B ET AL) 9 September 1997 (1997-09-09) * column 2, line 4 - line 29 * * column 6, line 51 - column 7, line 5 *	1	
A	US 6 014 576 A (RALEY DENA M) 11 January 2000 (2000-01-11) * abstract *	1	
A	US 5 387 122 A (GOLDBERGER DANIEL S ET AL) 7 February 1995 (1995-02-07) * column 1, line 58 - column 3, line 14 *	1	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
Place of search BERLIN		Date of completion of the search 8 August 2003	Examiner Abraham, 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 & : member of the same patent family, corresponding document</p>			

EPO FORM 1503 (03.92) (P04C01)



European Patent
Office

Application Number
EP 01 31 0925

CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- ☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



European Patent
Office

**LACK OF UNITY OF INVENTION
SHEET B**

Application Number
EP 01 31 0925

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claim : 1

Method of facilitating the intra-departmental or inter-institutional transport of a patient requiring pulse oximeter monitoring.

2. Claim : 2

Use of a pulse oximeter comprising fiber optical components with an MRI machine where no ferrous material can be located.

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 01 31 0925

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

08-08-2003

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0021433	A	20-04-2000	US 6144868 A	07-11-2000
			US 6343224 B1	29-01-2002
			AU 745306 B2	21-03-2002
			AU 1092900 A	01-05-2000
			BR 9914423 A	26-06-2001
			CA 2346639 A1	20-04-2000
			EP 1121049 A1	08-08-2001
			JP 2002527133 T	27-08-2002
			WO 0021433 A1	20-04-2000
			US 2003009092 A1	09-01-2003
			US 6519487 B1	11-02-2003
			US 2001029325 A1	11-10-2001
US 5273041	A	28-12-1993	DE 69313915 D1	23-10-1997
			DE 69313915 T2	02-04-1998
			EP 0568380 A1	03-11-1993
			IL 105435 A	31-10-1996
			JP 6014904 A	25-01-1994
US 5786592	A	28-07-1998	DE 19703220 A1	31-07-1997
			SE 9600322 A	31-07-1997
US 5279295	A	18-01-1994	DE 3938759 A1	29-05-1991
			EP 0430340 A2	05-06-1991
			JP 3173536 A	26-07-1991
WO 9221281	A	10-12-1992	EP 0587718 A1	23-03-1994
			WO 9221281 A1	10-12-1992
US 5910108	A	08-06-1999	US 5673693 A	07-10-1997
			US 5507286 A	16-04-1996
			US 6119027 A	12-09-2000
			US 2003139657 A1	24-07-2003
US 5437275	A	01-08-1995	NONE	
US 5991648	A	23-11-1999	NONE	
WO 0042911	A	27-07-2000	AU 2859600 A	07-08-2000
			CA 2358454 A1	27-07-2000
			EP 1148809 A1	31-10-2001
			JP 2002535026 T	22-10-2002
			WO 0042911 A1	27-07-2000
			US 2002140675 A1	03-10-2002
			US 6584336 B1	24-06-2003

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 01 31 0925

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

08-08-2003

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 5664270	A	09-09-1997	US	6493568 B1	10-12-2002
US 6014576	A	11-01-2000	EP	1207782 A1	29-05-2002
			WO	9943256 A1	02-09-1999
US 5387122	A	07-02-1995	US	5249576 A	05-10-1993
			DE	69228515 D1	08-04-1999
			DE	69228515 T2	21-10-1999
			EP	0538631 A1	28-04-1993
			JP	5200018 A	10-08-1993

EPO FORM P4439

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

专利名称(译)	可重复使用的脉搏血氧仪探头和一次性绷带方法		
公开(公告)号	EP1222894A3	公开(公告)日	2003-10-15
申请号	EP2001310925	申请日	2001-12-28
[标]申请(专利权)人(译)	SENSIDYNE		
申请(专利权)人(译)	SENSIDYNE INC.		
当前申请(专利权)人(译)	Masimo公司		
[标]发明人	PARKER BRENT		
发明人	PARKER, BRENT		
IPC分类号	A61B5/145 A61B5/00 A61B5/1455 A61B5/055		
CPC分类号	A61B5/6826 A61B5/14552 A61B5/6838		
代理机构(译)	JONES , GRAHAM H.		
优先权	09/758038 2001-01-11 US		
其他公开文献	EP1222894B1 EP1222894A2		
外部链接	Espacenet		

摘要(译)

一种促进需要脉搏血氧计监测的患者或患者的部门内或机构间运输的方法，并且其中用于监测患者的脉搏血氧计可以是不同的制造商，包括将具有绷带的绷带装置固定到患者身上。模块化发射器和检测器插座结合在其上。每个不同制造商的脉搏血氧计探针设置有模块化壳体，其适于配合地接合和/或脱离一次性绷带设备的容器，从而使得患者能够由不同制造商的脉搏血氧计监测而无需改变绷带设备。

