(19) Europäisches Patentamt
European Patent Office
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(11) EP 1 588 662 A3

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
30.11.2005 Bulletin 2005/48

(43) Date of publication A2:
26.10.2005 Bulletin 2005/43

(21) Application number: **05076774.8**

(22) Date of filing: **04.08.2003**

(51) Int Cl.[7]: **A61B 5/087**

(84) Designated Contracting States:
DE FR GB NL

(30) Priority: **23.08.2002 US 226597**

(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC:
03254858.8 / 1 391 178

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(54) Biosensor for measuring cardiopulmonary activity and method for its use

(57) A portable sensor device (10) for obtaining physiological information, including cardiopulmonary information, from a human or animal subject. The device includes a housing (14) having a lumen (22) and a respiratory port (20) in fluid communication with the lumen (22). The lumen (22) can be divided into plural airflow tubes (30,32). Spirometric data can be integrated with non-spirometric cardiopulmonary data collected by the device (10). Additionally, the sensor device (10) can be operably coupled to a bioactive composition delivery device. Methods for using the sensor device and methods for making the sensor device also are disclosed.

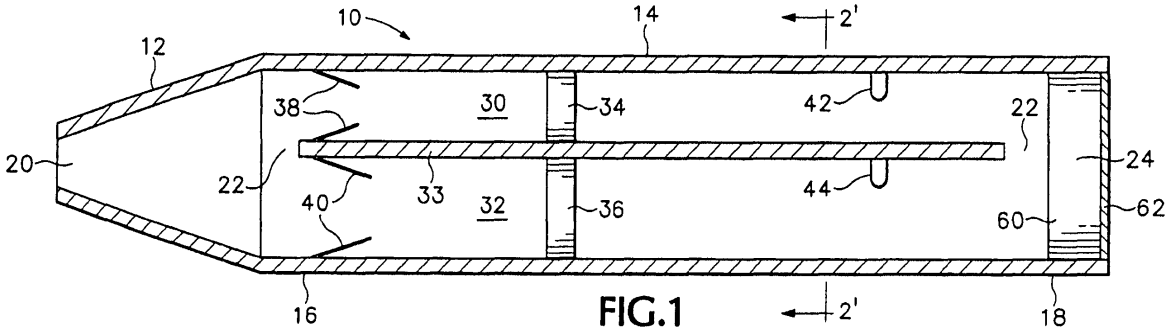

FIG.1

EP 1 588 662 A3

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EUROPEAN SEARCH REPORT

Application Number
EP 05 07 6774

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	EP 0 552 916 A (PURITAN BENNETT CORP) 28 July 1993 (1993-07-28) * column 12, line 20 - column 12, line 41; figure 15 * * column 13, line 2 - column 13, line 19; figure 18 *	1,2	A61B5/087
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Y	* page 7, line 4 - page 7, line 10 * * page 9, line 20 - page 9, line 26 * * page 10, line 25 - page 11, line 29 * * page 12, line 20 - page 13, line 3 * * page 15, line 8 - page 16, line 5 * * figures 1,2 *	6,10	
X	WO 00/67634 A (MAULT JAMES R) 16 November 2000 (2000-11-16)	1,4,5, 7-9	
Y	* page 4, line 6 - page 4, line 20 * * page 6, line 5 - page 6, line 12 * * page 7, line 1 - page 7, line 16 * * page 8, line 8 - page 8, line 11 * * page 10, line 1 - page 10, line 4 * * claims 1-11; figure 1 *	6,10	TECHNICAL FIELDS SEARCHED (Int.Cl.7) A61B
Y	US 2002/032387 A1 (TRACHTENBERG LEONID ET AL) 14 March 2002 (2002-03-14) * figures 2-6 * * paragraph [0001] * * paragraph [0014] * * paragraph [0063] * * paragraph [0065] * * paragraph [0105] *	6,10	

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	12 September 2005	Lommel, A

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

EPO FORM 1503 03.82 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 05 07 6774

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专利名称(译)	用于测量心肺活动的生物传感器及其使用方法		
公开(公告)号	EP1588662A3	公开(公告)日	2005-11-30
申请号	EP2005076774	申请日	2003-08-04
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IPC分类号	A61B5/08 A61B5/00 A61B5/0205 A61B5/024 A61B5/083 A61B5/087 A61B7/00		
CPC分类号	A61B5/087 A61B5/0205 A61B5/024 A61B5/0871 A61B5/14553 A61B5/411 A61B7/003		
优先权	10/226597 2002-08-23 US		
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摘要(译)

一种便携式传感器装置（10），用于从人或动物受试者获得生理信息，包括心肺信息。该装置包括壳体（14），壳体（14）具有内腔（22）和与内腔（22）流体连通的呼吸端口（20）。内腔（22）可以分成多个气流管（30,32）。肺量计数据可以与装置（10）收集的非肺活量计心肺数据整合。另外，传感器装置（10）可以可操作地连接到生物活性组合物递送装置。还公开了使用传感器装置的方法和制造传感器装置的方法。

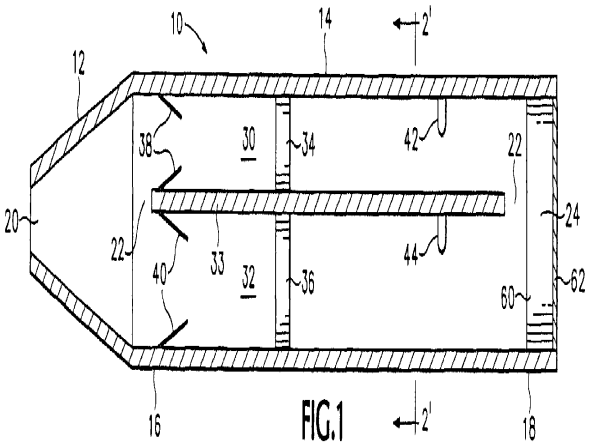

FIG.1