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(71) Applicant: **Adidas AG**
91072 Herzogenaurach (DE)

(72) Inventors:
- **Sackner, Marvin A.**
  Miami Beach, FL 33139 (US)
- **Inman, D. Michael**
  Miami, FL 33138 (US)

(74) Representative: **Wegner, Hans**
Bardehle Pagenberg Partnerschaft mbB
Patentanwälte, Rechtsanwälte
Prinzregentenplatz 7
81675 München (DE)

(54) Systems and methods for ambulatory monitoring of physiological signals

(57) The present invention relates to the field of ambulatory and non-invasive monitoring of a plurality of physiological parameters of a monitored individual. The invention includes a physiological monitoring apparatus with an improved monitoring apparel worn by a monitored individual, the apparel having attached sensors for monitoring parameters reflecting pulmonary function, or parameters reflecting cardiac function, or parameters reflecting the function of other organ systems, and the apparel being designed and tailored to be comfortable during the individual's normal daily activities. The apparel is preferably also suitable for athletic activities. The sensors preferably include one or more ECG leads and one of more inductive plethysmographic sensors with conductive loops positioned closely to the individual to preferably monitor at least basic cardiac parameters, basic pulmonary parameters, or both. The monitoring apparatus also includes a unit for receiving data from the sensors, and for storing the data in a computer-readable medium. The invention also includes systems comprising a central data repository for receiving, storing, and processing data generated by a plurality of physiological monitored apparatus, and for making stored data available to the individual and to the health care providers.

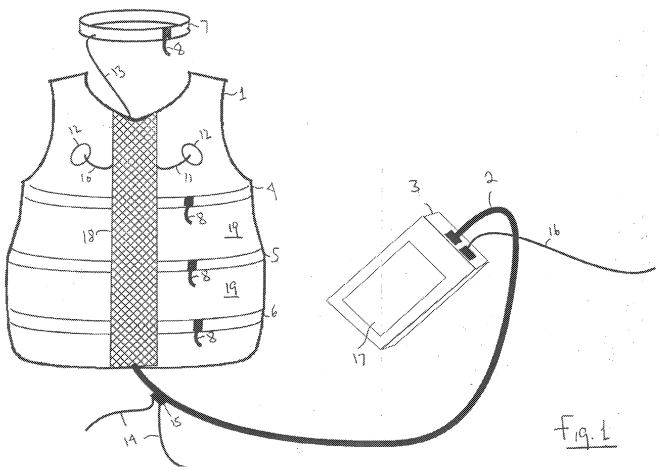

Fig. 1

EP 2 324 761 A3

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EUROPEAN SEARCH REPORT

Application Number
EP 10 19 5425

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	WO 98/41279 A1 (NIMS INC [US]) 24 September 1998 (1998-09-24) * abstract * * page 2, paragraph 2 - page 16, paragraph 1; claims; figures * -----	1-7	INV. A61B5/0205 A61B5/113
A	US 5 544 661 A (DAVIS CHARLES L [US] ET AL) 13 August 1996 (1996-08-13) * abstract * * column 2, line 57 - column 4, line 39 * * column 5, line 51 - column 6, line 59; figures 1-5 * -----	1-7	
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A	WO 89/02246 A1 (CAPINTEC INC [US]) 23 March 1989 (1989-03-23) * the whole document * -----	1-7	
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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	9 May 2014	Juárez Colera, M

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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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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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 10 19 5425

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

专利名称(译)	用于动态监测生理信号的系统和方法		
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[标]申请(专利权)人(译)	阿迪达斯股份公司		
申请(专利权)人(译)	阿迪达斯		
当前申请(专利权)人(译)	阿迪达斯		
[标]发明人	SACKNER MARVIN A INMAN D MICHAEL		
发明人	SACKNER, MARVIN A. INMAN, D. MICHAEL		
IPC分类号	A61B5/0205 A61B5/113 A61B5/00 A61B5/0245 A61B5/0404 A61B5/0408 A61B5/0432 A61B5/0436 A61B5/0478 A61B5/053 A61B5/08 A61B5/103 A61B5/11 A61B5/145 A61B7/00		
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优先权	60/197589 2000-04-17 US		
其他公开文献	EP2324761A2		
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摘要(译)

本发明涉及被监测个体的多个生理参数的非卧床和非侵入性监测领域。本发明包括一种生理监测装置，其具有由受监测个体佩戴的改进的监测服装，该服装具有用于监测反映肺功能的参数的传感器，或反映心脏功能的参数，或反映其他器官系统的功能的参数，并且服装是专为个人日常活动而设计和量身定制。服装优选地也适用于运动活动。传感器优选地包括一个或多个ECG导联和一个或多个感应体积描记传感器，其中导电环紧邻个体定位，以优选地监测至少基本心脏参数，基本肺部参数或两者。监视装置还包括用于从传感器接收数据并用于将数据存储在计算机可读介质中的单元。本发明还包括系统，该系统包括中央数据存储库，用于接收，存储和处理由多个生理监测装置产生的数据，并用于使存储的数据可供个人和医疗服务提供者使用。