

Nicolas Vargas

Search history

- Search 1: STA=(HEART RATE) and PD<20160721 (Results 8330)
- Search 2: 1 and gsm (Results 180)
- Search 3: 2 and wireless (Results 131)
- Search 4: 3 and modem (Results 32)
- Search 5: 4 and lora (Results 0)
- Search 6: 4 and lora\* (Results 2)
- Search 7: 4 and database (Results 19)
- Search 8: 7 and packet\* (Results 10)

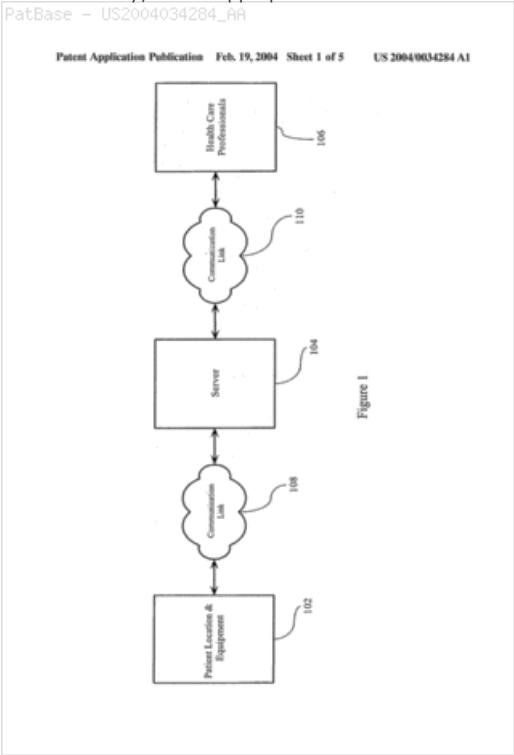
1) Family number: 30310033 (US2004034284A) © PatBase

Title: PATIENT INITIATED EMERGENCY RESPONSE SYSTEM

**Abstract:** A method and system for encouraging cardiac patients to seek prompt medical attention upon the onset of symptoms of an AMI or other serious heart problems that can be identified by ECG's or other similar measurements is disclosed. A patient is prescribed a personal monitoring module that includes the necessary equipment to monitor one or more parameters (e.g., heart rate, ECG, etc), and which has the ability to automatically transmit or "push" the data relating to these parameters to a central server. The personal monitoring module utilizes a novel harness to automatically situate the ECG leads in proper positions, and can be operated in different modes so that it can be used for training purposes and for routine data gathering, as well as be used in emergent situations to, when appropriate, automatically alert appropriate medical personnel and initiate the process of obtaining medical assistance for the patient. Healthcare professionals can access the central server to view the data and telecommunications links can be established so that the entire emergency team can be apprised of the information pertaining to the patient almost immediately, where appropriate.

Classifications:

**International (IPC 8-9):** A61B5/00 (Advanced/Invention);  
A61B5/00 (Core/Invention)  
**International (IPC 1-7):** A61B5/00  
**CPC:** A61B5/0006  
**European:** A61B5/00B2 A61B5/00B3B  
**US:** 600/300 600/300P



Family:

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| US2004034284 AA    | 20040219         | US20030410682      | 20030410         |

Priority:

US20020371327P 20020410 US20030410682 20030410

Probable Assignee: JOHNS HOPKINS UNIV

Assignee(s): AVERSANO THOMAS R ; ELKISS DALE R ; MAUGHAN WILLIAM L ; NATIONAL INST ; NATIONAL INSTITUTES OF HEALTH (NIH) US DEPT OF HEALTH AND HUMAN SERVICES (DHHS) US GOVERNMENT ; NATIONAL INSTITUTES OF HEALTH NIH US DEPT OF HEALTH AND HUMAN SERVICES DHHS US GOVERNMENT ; PALMER JAMES G ; WEISKOPF FRANCIS B ; NATIONAL INSTITUTES OF HEALTH ; JOHNS HOPKINS UNIV

**Inventor(s):** (std): AVERSAÑO THOMAS R ; ELKISS DALE R ; MAUGHAN WILLIAM L ; PALMER JAMES G ; WEISKOPF FRANCIS B

**2) Family number: 40812058** (US2007265533A)

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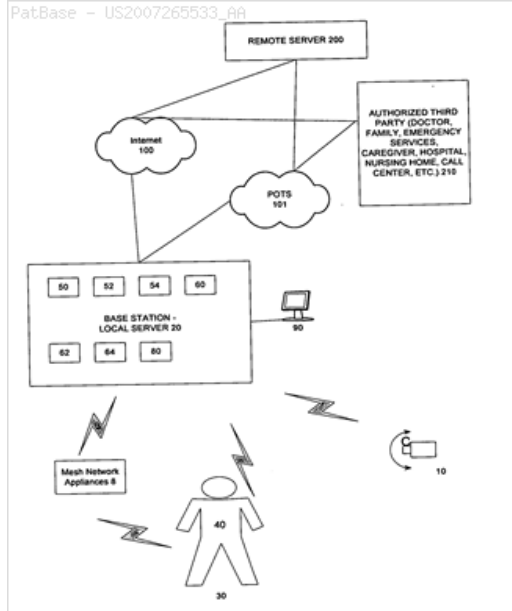
**Title:** CUFFLESS BLOOD PRESSURE MONITORING APPLIANCE

**Abstract:** A heart monitoring system for a person includes one or more **wireless** nodes forming a **wireless** mesh network and a wearable appliance having a sound transducer coupled to the **wireless** transceiver; and a heart disease recognizer coupled to the sound transducer to determine cardiovascular health and to transmit heart sound over the **wireless** mesh network to a remote listener or processor.

**Classifications:**

**International (IPC 8-9):** A61B19/00 A61B5/00 A61B5/01 A61B5/02 A61B5/0205 A61B5/021 A61B5/024 A61B5/026 A61B5/03 A61B5/04 A61B5/0402 A61B5/0452 A61B5/0476 A61B5/0488 A61B5/053 A61B5/11 A61B5/145 A61B5/1455 A61B5/20 A61B6/00 A61B7/04 A61B8/00 A61B8/06 A61N5/04 G06F19/00 G08B21/02 G08B23/00 G08C15/06 H04L12/66 (Advanced/Invention); A61B5/00 A61B5/0215 A61B5/022 A61B5/024 A61B5/04 A61B5/0402 A61B5/044 A61B5/0452 A61B5/0476 A61B5/0488 A61B5/0492 A61B5/053 A61B5/08 A61B5/103 A61B5/117 A61B5/145 A61B5/1455 A61B5/22 A61B8/00 A61B8/08 G06F19/00 (Advanced/Non-invention); A61B5/00 A61B5/02 A61B5/0205 A61B5/04 A61B5/11 A61N5/02 H04L12/66 (Core/Invention)

**CPC:** A61B5/6833 A61B5/0004 A61B5/0015 A61B5/026 A61B5/11 A61B5/6802 A61B5/683 A61B2560/0228 A61B5/0026 A61B5/002 A61B5/686 G08B21/02 A61B5/031 A61B5/201 A61B5/4875 A61B5/0816 H04M3/5116 H04M2203/1075 H04M2250/12 A61B5/02438 A61B5/1118 A61B5/6898 A61B5/044 A61B5/0452 A61B5/0537 A61B5/14551 A61B5/6814 A61B5/6815 A61B5/6887 A61B5/741 A61B8/06 A61B8/4227 A61B8/582 A61B7/045 A61B5/6846 A61B5/0215 A61B5/01 A61B5/022 A61B5/024 A61B5/742 A61B5/14542 A61B5/0077 A61B5/6803 A61B5/6808 A61B5/0492 A61B5/1112 A61B5/14532 A61B5/6891 A61B5/7465 A61B2560/0233 A61B5/4023 A61B5/4076 A61B5/04005 A61B5/7271 A61B5/7435 A61B5/7455 A61B5/7475 A61B5/02108 A61B5/0295 A61B5/4866 A61B5/00 A61B5/02405 A61B90/30 A61B5/0024 A61B5/021 A61B5/4806 A61B5/4833 A61B5/7257 A61B5/7264 A61B5/7275 A61B5/7282 A61B5/7405 A61B5/746 A61B5/747 A61B7/04 A61B2503/08 A61B2560/0412 G16H40/63 G16H10/60 G16H50/20 G16H40/67 H04W4/80 A61B8/00 A61B7/00 G16H20/60 G16H30/20 A61B5/0006 A61B5/0008 A61B5/0022 A61B5/0205 A61B5/02055 A61B5/04004 A61B5/0402 A61B5/0476 A61B5/0488 A61B5/1038 A61B5/1113 A61B5/1114 A61B5/1116 A61B5/1117 A61B5/112 A61B5/1124 A61B5/1128 A61B5/1176 A61B5/224 A61B5/411 A61B5/4519 A61B5/4528 A61B5/4803 A61B5/681 A61B5/6816 A61B5/6822 A61B5/6826 A61B5/6838 A61B5/7203 A61B5/7214 A61B5/7225 A61B5/726 A61B5/7267 A61B5/743 A61B8/0808 A61B8/56 A61B8/565 A61B2505/01 A61B2560/0214 A61B2560/0223 A61B2560/0468 A61B2562/0219 G06F19/321 G06F19/3418 G06F19/3456  
**European:** A61B5/00B A61B5/00B5F A61B5/00B5H A61B5/0205 A61B5/021 A61B5/11M A61B5/11N A61B5/11N2 A61B5/11P A61B5/11P2 A61B5/41B A61B5/48B A61B5/68B1H A61B5/68B2B1B A61B5/68B2D A61B5/68B2J1 A61B5/68B3L A61B5/72B A61B5/72B2D A61B5/72F A61B7/04 G06F19/34A G06F19/34C G06F19/34K K61B5/00B3B K61B5/00B3D K61B5/0205B K61B5/021 K61B5/0402 K61B5/0476 K61B5/0488 K61B5/0492 K61B5/04J K61B5/103P2 K61B5/117F K61B5/11P2 K61B5/11R K61B5/11U K61B5/11W4 K61B5/145G K61B5/145N K61B5/22D K61B5/41B K61B5/45F K61B5/45K K61B5/68B2J1 K61B5/72B2D K61B5/72F K61B5/72K10B K61B5/72K10D K61B5/72K12 K61B5/74K K61B560/02B4 K61B560/02D K61B560/04B2 K61B560/04L2 K61B562/02C S06F19/32A S06F19/32C S06F19/34L  
**US:** 1/1 340/539.12 340/573.1 340/870.02 340/870.07 340/870.3 370/352 370/352S 600/300 600/301 600/301P 600/309 600/323 600/324 600/364 600/365 600/409 600/437 600/454 600/476 600/479 600/481 600/481P 600/483 600/483P 600/484 600/485 600/508 600/508P 600/508S 600/509 600/509P 600/509S 600/513 600/515 600/528 600/528S 600/529 600/531 600/544 600/549 600/561 600/595 600/595S



**Family:**

| Publication number | Publication date | Application number | Application date |
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| US2007265533 AA    | 20071115         | US20060433900      | 20060512         |
| US2007276270 AA    | 20071129         | US20060439631      | 20060524         |
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#### Priority:

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| US20150941494 20151113 |                        |                        |

**Probable Assignee:** PHILIPS NORTH AMERICA LLC

**Assignee(s):** (std): EMPIRE IP LLC ; TRAN BAO ; TRAN HA THI ; PHILIPS KONINKLL NV

**Assignee(s):** WEST 74TH STREET SERIES 75 OF ALLIED SECURITY TRUST I ; PHILIPS NORTH AMERICA LLC

**Inventor(s):** (std): TRAN BAO ; TRAN HA THI ; TRAN HA

**Agent(s):** TRAN AND ASSOCIATES; BAO Q TRAN; KELLY L; KASHA LAW LLC; JOHN R

### 3) Family number: 61741088 (US2016051153A)

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**Title:** RADIO FREQUENCY IDENTIFICATION (RFID) ENABLED **WIRELESS HEART RATE** MONITORING SYSTEM

**Abstract:** Devices and systems for continuous monitoring of the **heart rate** of a patient diagnosed with or at risk of heart diseases. **Wireless** communication technologies such as radio frequency identification (RFID), Bluetooth and WiFi are integrated into a **heart rate** monitoring device to connect it to a communication device, the patient's **database** at a healthcare institution and to trigger an automatic call for emergency services through the communication device when emergency medical attention is needed.

#### Classifications:

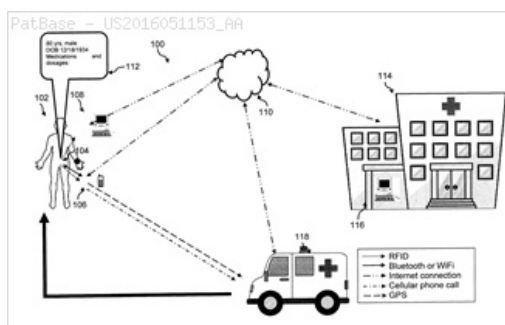
**International (IPC 8-9):** A61B5/00 A61B5/0245 A61B5/11

A61B5/1455 (Advanced/Invention)

**CPC:** A61B5/747 A61B5/7282 A61B5/02427 A61B5/02444

A61B5/02455 A61B5/1102 A61B5/1455 A61B5/0006 G16H80/00

**US:** 600/324 600/508 600/509 600/528



#### Family:

| Publication number | Publication date | Application number | Application date |
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| US2016051153 AA    | 20160225         | US20140467755      | 20140825         |

#### Priority:

US20140467755 20140825

**Probable Assignee:** MOUSLY RAYAN NABIL M

**Assignee(s):** (std): MOUSLY RAYAN NABIL M

**Inventor(s):** (std): MOUSLY RAYAN NABIL M

### 4) Family number: 41801261 (US2008113785A)

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**Title:** CONDITIONAL BIOMETRIC ACCESS IN A GAMING ENVIRONMENT

**Abstract:** The present application provides methods and corresponding systems for accessing services in a gaming or other environment based on conditional biometric identity verification. In one aspect, this includes the step or steps of determining a location of a gaming device having a display and at least one biometric sensor associated therewith; prompting a user of the gaming device for at least one item of physical biometric data with the biometric sensor based at least on the location of the gaming device; receiving the at least one item of physical biometric data; and enabling at least one service on the gaming device based on a match between the at least one item of physical biometric data received and at least one authenticated item of physical biometric data associated with the user.

#### Classifications:

**International (IPC 8-9):** A63F13/00 A63F13/02 A63F13/12 A63F13/21

A63F13/212 A63F13/327 A63F13/332 A63F13/35 A63F13/40

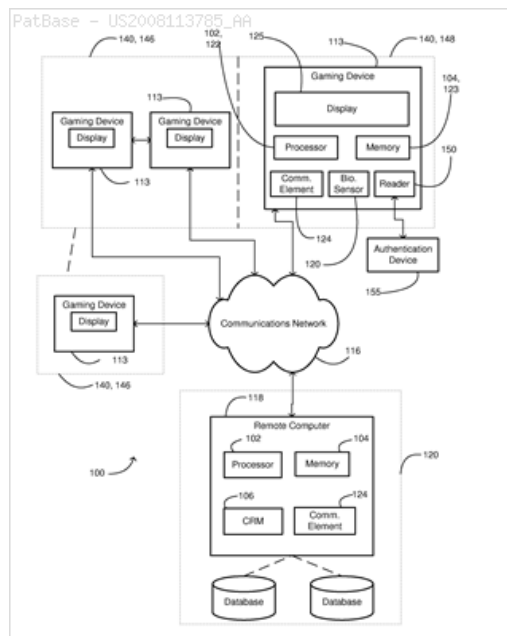
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G07F17/32 H04K1/00 H04M11/00 H04W12/06

H04W64/00 (Advanced/Invention);

A63F13/00 A63F9/24 G06F17/00 G06F19/00 G06K9/00  
G07F17/32 (Advanced/Non-invention);  
A63F13/00 A63F13/12 A63F9/24 G06F19/00 G06K9/20  
G07F17/32 (Core/Invention)  
**CPC:** A63F13/212 A63F13/73 A63F13/332 A63F2300/406 G06F21/32  
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G07F17/3206 G07F17/323 G07F17/3237 G07F17/3241  
**European:** G06F21/31 G06F21/32 G07F17/32 G07F17/32C2B  
G07F17/32E4 G07F17/32E6D G07F17/32H K63F300/53C  
S06F221/2111  
**US:** 1/1 382/115 463/25 463/29 463/29P 463/36 713/186 726/19



## Family:

| Publication number | Publication date | Application number | Application date |
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| WO08061138 A2      | 20080522         | WO2007US84669      | 20071114         |
| WO08061138 A3      | 20080724         | WO2007US84669      | 20071114         |

## Priority:

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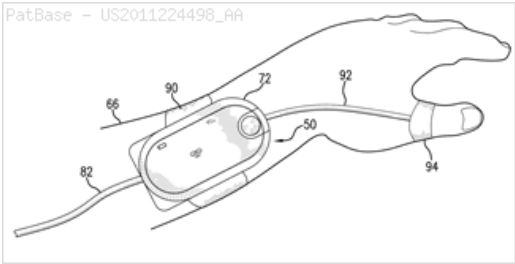
**Probable Assignee:** CFPH LLC

**Assignee(s):** (std): ASHER JOSPEH M ; CFPH LLC ; PAPAGEORGIOU ANTONIO ; DEAN ALDERUCCI ; ASHER JOSEPH M ; JOSEPH ASHER ; ALDERUCCI DEAN P

**Assignee(s):** DEAN P ALDERUCCI ; ANTONIO PAPAGEORGIOU ; JOSPEH M ASHER ; CFPH LLC110 E. 59TH STREETNEW YORKNY10022US  
**Inventor(s):** (std): PAPAGEORGIOU ANTONIO ; ASHER JOSEPH M ; ALDERUCCI DEAN P ; JOSEPH M ASHER ; ASHER JOSPEH M ; ANTONIO PAPAGEORGIOU  
**Inventor(s):** DEAN P ALDERUCCI ; ALDERUCCI DEAN PUS ; ASHER JOSEPH MUS ; PAPAGEORGIOU ANTONIOUS ; JOSPEH M ASHER  
**Agent(s):** PIZZEYS; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; OGILVY RENAULT LLP SENCRL SRL; DICKINSON WRIGHT LLP; BERESFORD KEITH DENIS LEWIS; DEAN P ALDERUCCI; GLEN R; THOMAS D; PAPAGEORGIOU ANTONIO ET AL  
**Designated states:** AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

**5) Family number: 49578390 (US2011224498A)** © PatBase  
**Title:** BODY-WORN VITAL SIGN MONITOR

**Abstract:** The invention provides a body-worn vital sign monitor that measures a patient's vital signs (e.g. blood pressure, SpO2, heart rate, respiratory rate, and temperature) while simultaneously characterizing their activity state (e.g. resting, walking, convulsing, falling) and posture (upright, supine). The monitor processes this information to minimize corruption of the vital signs and associated alarms/alerts by motion-related artifacts. It also features a graphical user interface (GUI) rendered on a touchpanel display that facilitates a number of features to simplify and improve patient monitoring and safety in both the hospital and home.  
**Classifications:**  
**International (IPC 8-9):** A61B5/00 A61B5/0205 A61B5/021 A61B5/0402 G06F19/00 G06F3/041 G08B9/00 H04N5/225 H04W4/20 (Advanced/Invention); H04W4/02 (Advanced/Non-invention)  
**CPC:** A61B5/00 A61B5/0002 A61B5/411 A61B5/6824 A61B5/746 A61B5/7465 H04W4/02 H04W4/029  
**European:** A61B5/00 A61B5/41B A61B5/68B2H  
**US:** 1/1 340/313 340/69 340/7.58 345/173 345/173S 348/376 348/376S 348/E5.024 348/E50.24S 600/300 600/300P 600/301 600/301P 600/485 600/485P 600/509 600/509P 600/545



**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| DE602011041734 D1  | 20171102         | DE201160041734T    | 20110310         |
| EP2544584 A1       | 20130116         | EP20110754055      | 20110310         |
| EP2544584 A4       | 20150715         | EP20110754055      | 20110310         |
| EP2544584 B1       | 20170920         | EP20110754055      | 20110310         |
| IN02160MN2012 A    | 20140124         | IN2012MN02160      | 20120911         |
| SG10201502467U A1  | 20150528         | SG20151002467      | 20110310         |
| SG183973 A1        | 20121030         | SG20120066742      | 20110310         |
| US2011224498 AA    | 20110915         | US20100762790      | 20100419         |
| US2011224499 AA    | 20110915         | US20100762836      | 20100419         |
| US2011224500 AA    | 20110915         | US20100762846      | 20100419         |
| US2011224506 AA    | 20110915         | US20100762726      | 20100419         |
| US2011224507 AA    | 20110915         | US20100762733      | 20100419         |
| US2011224508 AA    | 20110915         | US20100762822      | 20100419         |
| US2011224556 AA    | 20110915         | US20100762777      | 20100419         |
| US2011224557 AA    | 20110915         | US20100762810      | 20100419         |
| US2011224564 AA    | 20110915         | US20100762751      | 20100419         |
| US2019183422 AA    | 20190620         | US20190285015      | 20190225         |
| US2019254600 AA    | 20190822         | US20190404435      | 20190506         |
| US8591411 BB       | 20131126         | US20100762733      | 20100419         |
| US8727977 BB       | 20140520         | US20100762810      | 20100419         |
| US10213159 BB      | 20190226         | US20100762726      | 20100419         |
| US10278645 BB      | 20190507         | US20100762822      | 20100419         |
| WO11112782 A1      | 20110915         | WO2011US27843      | 20110310         |

**Priority:**

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| US20100312264P | 20100310 | US20100312624P | 20100310 | US20100762726 | 20100419 |
| US20100762751  | 20100419 | US20100762733  | 20100419 | US20100762777 | 20100419 |
| US20100762790  | 20100419 | US20100762836  | 20100419 | US20100762846 | 20100419 |
| US20100762822  | 20100419 | US20100762810  | 20100419 | EP20110754055 | 20110310 |
| WO2011US27843  | 20110310 | US20190285015  | 20190225 | US20190404435 | 20190506 |

**Probable Assignee:** SOTERA WIRELESS INC

**Assignee(s):** (std): BANET MATT ; DHILLON MARSHAL ; DIBATTISTA CAROLINE ; MCCOMBIE DEVIN ; MOON JIM ; SOTERA WIRELESS INC ; TROMMER GUNNAR ; WATLINGTON TOM ; TROMMER GUNNER ; SOTERA WIRELESS  
**Assignee(s):** SOTERA WIRELESS INC SAN DIEGO  
**Inventor(s):** (std): BANET MATT ; DIBATTISTA CAROLINE ; MOON JIM ; TROMMER GUNNER ; WATLINGTON TOM ; TROMMER GUNNAR ; MCCOMBIE DEVIN ; DHILLON MARSHAL  
**Agent(s):** SCHIWECK WEINZIERL AND KOCH; SCHIWECK WEINZIERL AND KOCH PATENTANWALTE PARTNERSCHAFT MB&B; MCCLAUGHLIN IP PTE LTD; ACUITY LAW GROUP PC; MICHAEL A; WHITTAKER MICHAEL A ET AL  
**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

**Title:** SYSTEM AND DEVICE FOR MULTI-SCALE ANALYSIS AND REPRESENTATION OF PHYSIOLOGICAL DATA

**Abstract:** System comprised of a medical device and method for analyzing physiological and health data and representing the most significant parameters at different levels of detail which are understandable to a lay person and a medical professional. Low, intermediate and high-resolution scales can exchange information between each other for improving the analyses; the scales can be defined according to the corresponding software and hardware resources. A low-resolution Scale I represents a small number of primary elements such as intervals between the heart beats, duration of electrocardiographic PQ, QRS, and QT-intervals, amplitudes of P-, Q-, R-, S-, and T-waves. This real-time analysis is implemented in a portable device that requires minimum computational resources. The set of primary elements and their search criteria can be adjusted using intermediate or high-resolution levels. At the intermediate-resolution Scale II, serial changes in each of the said elements can be determined using a mathematical decomposition into series of basis functions and their coefficients. This scale can be implemented using a specialized processor or a computer organizer. At the high-resolution Scale III, combined serial changes in all primary elements can be determined to provide complete information about the dynamics of the signal. This scale can be implemented using a powerful processor, a network of computers or the Internet. The system can be used for personal or group self-evaluation, emergency or routine ECG analysis, or continuous event, stress-test or bed-side monitoring.

**Classifications:**

**International (IPC 8-9):** A61B1/00 A61B5/00 A61B5/0205 A61B5/04 A61B5/0402 A61B5/0452 A61B5/055 A61N1/00 G06F19/00 (Advanced/Invention);

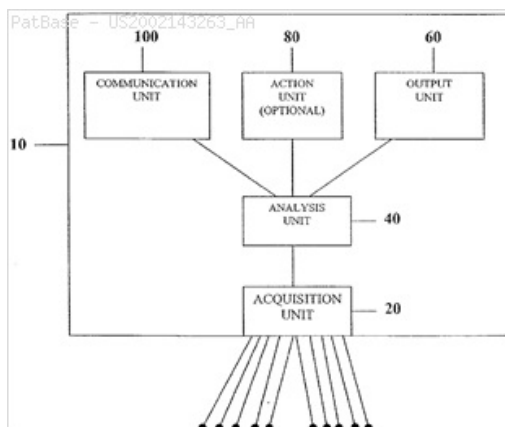
A61B5/04 A61B5/0428 A61B6/00 A61B6/03 (Advanced/Non-invention); A61B1/00 A61B5/00 A61B5/04 A61B5/0402 A61B5/0452 (Core/Invention)

**International (IPC 1-7):** A61B5/00 A61B5/02 A61B5/04 A61B5/0402 A61B5/044

**CPC:** A61B5/7232 G06F19/3418 A61B5/04007 A61B5/6822 A61B5/726 A61B5/0205 A61B5/04012 A61B5/0456 A61B5/0464 A61B5/0472 A61B5/7264 A61B5/7267 A61B5/0022 A61B5/02055 A61B5/04004 A61B5/0428 A61B5/055 A61B5/7203 A61B6/032 A61B6/5217 G16H50/20 G16H50/70 A61B5/0452 A61B5/411

**European:** A61B5/00B A61B5/0205 A61B5/0452 A61B5/0456 A61B5/0472 A61B5/04M2 A61B5/04R A61B5/41B A61B5/68B2D G06F19/34J G06F19/34K K61B5/0464 K61B5/72K10D

**US:** 1/1 600/300 600/504 600/504P 600/508 600/509 600/509P 600/513 600/513P 705/2

**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| AT394991 E         | 20080515         | AT20010939644T     | 20010529         |
| AU2001265140 AA    | 20011211         | AU20010265140      | 20010529         |
| AU200165140 A1     | 20011211         | AU20010065140      | 20010529         |
| AU200165140 A5     | 20011211         | AU20010065140      | 20010529         |
| DE60134010 D1      | 20080626         | DE20016034010      | 20010529         |
| EP1284645 A2       | 20030226         | EP20010939644      | 20010529         |
| EP1284645 A4       | 20040707         | EP20010939644      | 20010529         |
| EP1284645 B1       | 20080514         | EP20010939644      | 20010529         |
| US2002143263 AA    | 20021003         | US20020124651      | 20020417         |
| US2004193064 AA    | 20040930         | US20040816638      | 20040402         |
| US2006122525 AA    | 20060608         | US20060327546      | 20060106         |
| US2011004110 AA    | 20110106         | US20100885520      | 20100919         |
| US2013231947 AA    | 20130905         | US20130784815      | 20130304         |
| US6389308 BA       | 20020514         | US20000583668      | 20000530         |
| US6925324 BB       | 20050802         | US20020124651      | 20020417         |
| US7343197 BB       | 20080311         | US20040816638      | 20040402         |
| US7485095 BB       | 20090203         | US20060327546      | 20060106         |
| US7801591 BA       | 20100921         | US20060641268      | 20061220         |
| US8388530 BB       | 20130305         | US20100885520      | 20100919         |
| US9183351 BB       | 20151110         | US20130784815      | 20130304         |
| WO0191627 A2       | 20011206         | WO2001US17362      | 20010529         |
| WO0191627 A3       | 20020404         | WO2001US17362      | 20010529         |
| WO0191627 B1       | 20020627         | WO2001US17362      | 20010529         |

**Priority:**

|                        |                         |                        |
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| US20000583668 20000530 | WO2001US17362 20010529  | US20020124651 20020417 |
| US20040816638 20040402 | US20050646928P 20050124 | US20060327546 20060106 |
| US20060641268 20061220 | US20100885520 20100919  | US20130784815 20130304 |

**Probable Assignee:** SHUSTERMAN VLADIMIR

**Assignee(s):** (std): SHUSTERMAN VLADIMIR

**Assignee(s):** VLADIMIR SHUSTERMAN ; NATIONAL INSTITUTES OF HEALTH NIH US DEPT OF HEALTH AND HUMAN SERVICES DHHS US GOVERNMENT

**Inventor(s):** (std): SHUSTERMAN VLADIMIR

**Inventor(s):** VLADIMIR SHUSTERMAN

**Agent(s):** HOARTON LLOYD DOUGLAS CHARLES ET AL; ECKERT SEAMANS CHERIN AND MELLOTT; VLADIMIR SHUSTERMAN; DAVID W; BROWNLEE DAVID W; ECKERT SEAMANS CHERIN AND MELLOTT LLC; DAVID V; RADACK DAVID V; BROWNLEE ESQ DAVID W; RADACK ESQ DAVID V

**Designated states:** AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD ME MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

**Title:** BED DEVICE SYSTEM AND METHODS

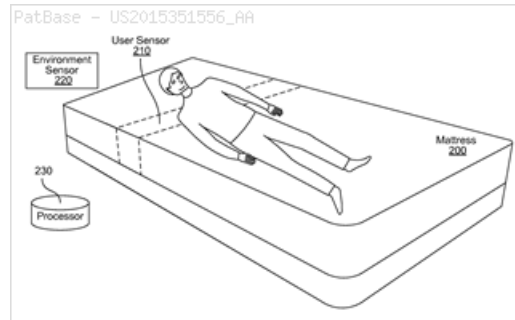
**Abstract:** Introduced are a bed device system and methods for: gathering human biological signals, such as **heart rate**, breathing rate, or temperature; analyzing the gathered human biological signals; and controlling the bed device system, e.g., a temperature of the bed device, based on the analysis.

**Classifications:**

**International (IPC 8-9):** A47C21/00 A47C21/04 A47C31/00 A47C31/10 A47C31/12 A47G9/02 A47J31/52 A61B5/00 A61B5/01 A61B5/0205 A61B5/024 A61B5/025 A61B5/08 A61B5/11 A61B5/117 A61G7/00 A61G7/043 A61M21/00 A61M21/02 G04G21/02 G05B15/02 G05B19/042 G05D23/00 G05D23/13 G05D23/19 G08B6/00 G16H40/67 H04L12/28 H05B1/02 (Advanced/Invention); A61B5/024 A61B5/08 A61B5/11 A61M16/16 A61M21/00 (Advanced/Non-invention)

**CPC:** A61B5/08 A61B5/7275 A61B5/746 A61B5/7225 A61B5/6891 G04G21/025 H04L12/2816 A61B2560/0266 A61M2205/3553 A61M2205/3561 A61M2205/3569 A61M2205/52 A61M2205/582 G06F19/00 A61B2562/029 A61M2021/0027 A61M2021/0044 A61M2205/3372 G16H40/63 A47C31/00 A61B2560/0252 G05B2219/2642 A47C21/00 A47C21/044 A47C21/048 A61B5/0022 A61B5/024 A61B5/0816 A61B5/11 A61B5/7455 A61B2505/07 A61B2560/0242 A61B2560/0475 A61B2562/0271 A61B2562/063 A61M16/161 A61M2021/0022 A61M2021/0066 A61M2021/0083 A61M2205/18 A61M2205/3306 A61M2205/3584 A61M2205/505 G16H40/67 A47G9/0238 A61B5/01 A61B5/4266 A61M21/02 A61M2205/0294 A61M2205/3673 A61M2205/50 G05B19/0428 G05B2219/2614 G05D23/1393 G08B6/00 H05B1/0272 A47C21/04 A47C31/123 A61B5/02055 A61B5/117 A61B5/4812 A61B5/6892 A61G7/00 A61G2203/46 A61G2210/70 A61G2210/90 A61M21/00 A61M2205/3303 A61M2205/3368 A61M2205/3375 A61M2205/3592 A61M2230/005 A61M2230/06 A61M2230/42 A61M2230/50 A61M2230/63 G05D23/1931

**US:** 1/1 156/60 219/486 219/490 219/494 340/575 5/421 600/27 600/484 600/508 600/529 600/549 600/595 700/275 700/300

**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| CA2985452 AA       | 20171108         | CA20162985452      | 20160503         |
| CA2985461 AA       | 20171108         | CA20162985461      | 20160505         |
| CA2985464 AA       | 20171108         | CA20162985464      | 20160505         |
| CA2985465 AA       | 20171108         | CA20162985465      | 20160505         |
| CN107847382 A      | 20180327         | CN201680040317     | 20160505         |
| CN107847383 A      | 20180327         | CN201680040387     | 20160505         |
| EP3294249 A1       | 20180321         | EP20160793226      | 20160505         |
| EP3294249 A4       | 20190703         | EP20160793226      | 20160505         |
| EP3294250 A1       | 20180321         | EP20160793228      | 20160505         |
| US2015351556 AA    | 20151210         | US20150732646      | 20150605         |
| US2015351700 AA    | 20151210         | US20150732643      | 20150605         |
| US2015352313 AA    | 20151210         | US20150732608      | 20150605         |
| US2015355605 AA    | 20151210         | US20150732624      | 20150605         |
| US2015355612 AA    | 20151210         | US20150732638      | 20150605         |
| US2016073788 AA    | 20160317         | US20150947685      | 20151120         |
| US2016073950 AA    | 20160317         | US20150946496      | 20151119         |
| US2016128488 AA    | 20160512         | US20150969902      | 20151215         |
| US2016136383 AA    | 20160519         | US20150969932      | 20151215         |
| US2016310697 AA    | 20161027         | US20160178124      | 20160609         |
| US2017028165 AA    | 20170202         | US20160293049      | 20161013         |
| US2017259028 AA    | 20170914         | US20170602969      | 20170523         |
| US2017296773 AA    | 20171019         | US20170449739      | 20170303         |
| US2019269878 AA    | 20190905         | US20180148376      | 20181001         |
| US2019321581 AA    | 20191024         | US20190457306      | 20190628         |
| US9186479 BA       | 20151117         | US20150732608      | 20150605         |
| US9586021 BB       | 20170307         | US20150969932      | 20151215         |
| US9694156 BB       | 20170704         | US20160178124      | 20160609         |
| US9981107 BB       | 20180529         | US20150732624      | 20150605         |
| WO15188156 A1      | 20151210         | WO2015US34574      | 20150605         |
| WO16182795 A1      | 20161117         | WO2016US30594      | 20160503         |
| WO16182858 A1      | 20161117         | WO2016US31054      | 20160505         |
| WO16182859 A1      | 20161117         | WO2016US31060      | 20160505         |
| WO16182860 A1      | 20161117         | WO2016US31062      | 20160505         |

**Priority:**

|                |          |                |          |                |          |
|----------------|----------|----------------|----------|----------------|----------|
| US20140008480P | 20140605 | US20140024945P | 20140715 | US20150159177P | 20150508 |
| US20150161142P | 20150513 | US20150732608  | 20150605 | US20150732624  | 20150605 |
| US20150732646  | 20150605 | US20150732643  | 20150605 | US20150732638  | 20150605 |
| US20150946496  | 20151119 | US20150947685  | 20151120 | US20150969902  | 20151215 |
| US20150969932  | 20151215 | WO2016US30594  | 20160503 | WO2016US31054  | 20160505 |
| WO2016US31060  | 20160505 | WO2016US31062  | 20160505 | US20160178124  | 20160609 |
| US20160293049  | 20161013 | US20170449739  | 20170303 | US20170602969  | 20170523 |
| US20180148376  | 20181001 | US20190457306  | 20190628 |                |          |

**Probable Assignee:** EIGHT SLEEP INC

**Assignee(s):** (std): EIGHT SLEEP INC ; MORPHY INC

**Assignee(s):** BASSI MASSIMO ANDREASI ; FRANCESCHETTI MATTEO

**Inventor(s):** (std): BASSI MASSIMO ANDREASI ; FRANCESCHETTI MATTEO

**Agent(s):** SMITHS IP; AHMAD SHEIKH SHAKEEL; PERKINS COIE LLP; PERKINS COIE LLLP; WILSON SONSINI GOODRICH AND ROSATI; NAMA VINOD ET AL; COLEMAN BRIAN R ET AL

**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW



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| US2007032246 AA | 20070208 | US20060413984 | 20060429 |
| US2007032250 AA | 20070208 | US20050197610 | 20050803 |
| US2007032266 AA | 20070208 | US20060413687 | 20060428 |
| US2007032832 AA | 20070208 | US20050197670 | 20050803 |
| US2007202890 AA | 20070830 | US20070745201 | 20070507 |
| US2007265018 AA | 20071115 | US20070766766 | 20070621 |
| US2008043868 AA | 20080221 | US20070875925 | 20071021 |
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| US2008253275 AA | 20081016 | US20070867688 | 20071005 |
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| US2009076803 AA | 20090319 | US20080324378 | 20081126 |
| US2009092114 AA | 20090409 | US20080335351 | 20081215 |
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| US2009240308 AA | 20090924 | US20090467995 | 20090518 |
| US2009247187 AA | 20091001 | US20090471293 | 20090522 |
| US2009270113 AA | 20091029 | US20090495714 | 20090630 |
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| US2010067595 AA | 20100318 | US20090623403 | 20091121 |
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| US2010208852 AA | 20100819 | US20100767802 | 20100427 |
| US2010238914 AA | 20100923 | US20100753802 | 20100402 |
| US2011075709 AA | 20110331 | US20100960534 | 20101205 |
| US2011150496 AA | 20110623 | US20110020513 | 20110203 |
| US2011154411 AA | 20110623 | US20110040188 | 20110303 |
| US2011206112 AA | 20110825 | US20110097878 | 20110429 |
| US2011265127 AA | 20111027 | US20110179545 | 20110710 |
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| US2012137333 AA | 20120531 | US20120360666 | 20120128 |
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| US2012220293 AA | 20120830 | US20120473282 | 20120516 |
| US2012224617 AA | 20120906 | US20070930159 | 20071031 |
| US2012250607 AA | 20121004 | US20120492273 | 20120608 |
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| US2013329139 AA | 20131212 | US20130735031 | 20130107 |
| US2014015690 AA | 20140116 | US20130025683 | 20130912 |
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| US2018295001 AA | 20181011 | US20180001948 | 20180607 |
| US2019199562 AA | 20190627 | US20190287978 | 20190227 |
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**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

**9) Family number: 55051757 (US2013289886A)**

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**Title:** CALORIE MONITORING SYSTEM

**Abstract:** Systems and methods for measuring calorie consumption and expenditure is disclosed. The system includes a peripheral device and a smart device. The peripheral device has one or more motion sensors and one or more weight sensors. The smart device is in electronic communication with the peripheral device and is configured to calculate calorie consumption and expenditure of a user based on data measured from the one or more motion sensors and one or more weight sensors.

**Classifications:**

**International (IPC 8-9):** A61B5/00 A61B5/01 A61B5/0205 A61B5/11 A61B5/145 G01G19/50 G06F17/00 G06F19/00 G06Q50/22 (Advanced/Invention)

**CPC:** G06F17/00 A61B5/1118 G06F19/3475 A61B5/0002 A61B5/02055 A61B5/02438 A61B5/1112 A61B5/6831 A61B5/6898 A61B5/0022 G01G19/50 A61B5/021 A61B5/0024 A61B5/0404 A61B5/1455 A61B2560/045 A61B5/024 A61B5/0537 A61B5/14532 A61B5/14546 A61B5/01 G06F19/3418 A61B5/14542 A61B5/6829 A61B5/686 G16H40/67 G16H50/30 G16H20/60 A61B5/4872 A61B5/681 G16H20/30

**US:** 600/301 600/409 600/483 600/549 600/595 702/19 705/2



**Family:**

| Publication number | Publication date | Application number | Application date |
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**Priority:**

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**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

**10) Family number: 30001769 (US2003220580A)**

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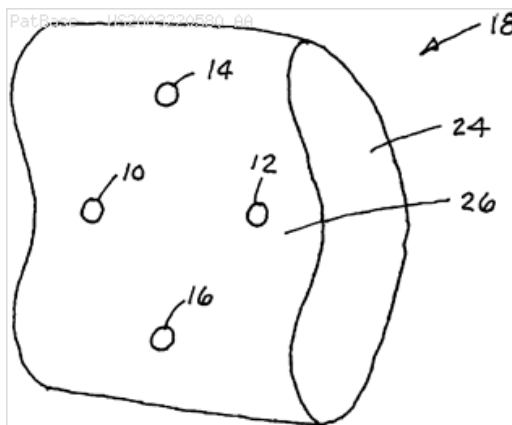
**Title:** CONGESTIVE HEART FAILURE MONITOR

**Abstract:** A device-implemented method is disclosed for early detection and monitoring of congestive heart failure in a patient. Ongoing measurements of impedance of a portion of the patient's body generally occupied by the lungs are performed by an implanted device, and, when the impedance measurements are determined by internal circuit components of the device to exceed a predetermined threshold value indicative of a need for immediate attention to a condition of congestive heart failure, a patient and/or physician alert is emitted by the device. An implant site at the left lower anterior lateral hemithorax is preferred.

**International (c.8-9):** A61B5/00 A61B5/02 A61B5/0205 A61B5/04 A61B5/402 A61B5/05 A61B5/053 A61B5/08 A61N1/36 A61N1/362 A61N1/365 A61N1/368 A61N1/378 A61N1/39 (Advanced/Invention); A61B5/08 A61N1/365 (Advanced/Non-invention); A61B5/00 A61B5/02 A61B5/0205 A61B5/04 A61B5/053 A61B5/08 A61N1/362 (Core/Invention); A61B5/08 A61N1/365 (Core/Non-invention)

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A61N1/3627 A61N1/36521

US: 600/301 600/484 600/484P 600/508 600/508P 600/509  
600/509P 600/513 600/513P 600/529 600/529S 600/536 600/536P  
600/547 600/547P 600/547S 607/17 607/17P 607/17S 607/18 607/18P 607/18S 607/19 607/20 607/3 607/35 607/42  
607/42S 607/59 607/60 607/62 607/62S 607/7 607/7S 607/9



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| WO2012US00041 | 20120125 | US20130694927 | 20130119 |               |          |

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**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA QZ RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TI TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW