

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
29 May 2008 (29.05.2008)

PCT

(10) International Publication Number  
**WO 2008/063288 A3**

(51) International Patent Classification:

A61B 7/00 (2006.01) A61N 1/365 (2006.01)

(21) International Application Number:

PCT/US2007/021503

(22) International Filing Date: 5 October 2007 (05.10.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

11/561,428 20 November 2006 (20.11.2006) US

(71) Applicant (for all designated States except US): **CARDIAC PACEMAKERS, INC.** [US/US]; 4100 Hamline Avenue North, St. Paul, MN 55112-5798 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **HARO, Carlos** [CO/US]; 172 6th Street East, St. Paul, MN 55101 (US). **ZHANG, Yi** [CN/US]; 11871 Isanti Street NE, Blaine, MN 55449 (US). **PATANGAY, Abhilash** [IN/US]; 9010 Carter Path, Inver Grove Heights, MN 55076 (US). **CARLSON, Gerrard, M.** [US/US]; 11653 Nevada Lane, Champlin, MN 55316 (US).

(74) Agents: **CLISE, Timothy, B.** et al.; Schwegman, Lundberg & Woessner, P.A., P.O. Box 2938, Minneapolis, MN 55402 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

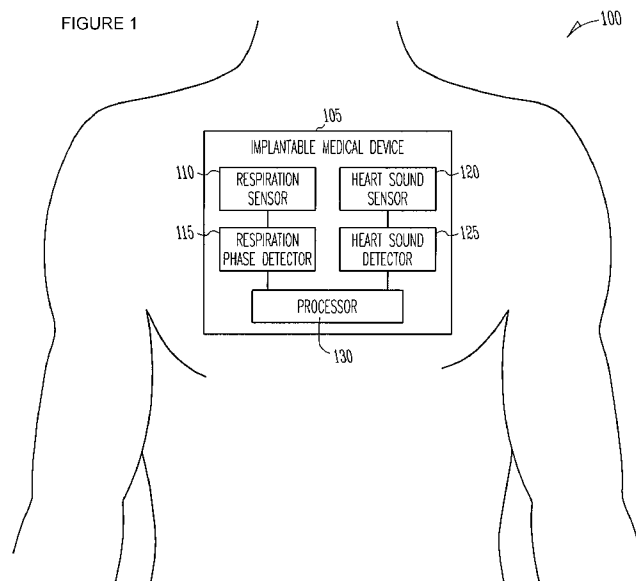
**Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) Title: RESPIRATION-SYNCHRONIZED HEART SOUND TRENDING

FIGURE 1



(57) Abstract: Respiration-synchronized heart sound trends can be detected using an implantable medical device, including a respiration sensor, a respiration phase detector, a heart sound sensor, a heart sound detector, and a processor. The implantable medical device can also include a cardiac sensor. The respiration-synchronized heart sound trends can include heart sounds occurring during specific phases of a respiration signal, such as inspiration or expiration. The heart sound signal can be gated or the heart sound sensor can be enabled or disabled using the cardiac sensor or the respiration sensor. Further, the heart sound trends can be displayed using an external display, and can provide information about a cardiovascular status using an analysis module, or the analysis module and a blood volume sensor.

WO 2008/063288 A3



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**(88) Date of publication of the international search report:**

31 July 2008

# INTERNATIONAL SEARCH REPORT

International application No  
PCT/US2007/021503

A. CLASSIFICATION OF SUBJECT MATTER  
INV. A61B7/00 A61N1/365

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A61N A61B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EP0-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

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Y	figures 4-7 paragraph [0045]	7, 11, 24, 28

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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Date of the actual completion of the international search

27 May 2008

Date of mailing of the international search report

05/06/2008

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Worms, Georg

# INTERNATIONAL SEARCH REPORT

International application No  
PCT/US2007/021503

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
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A		7, 11, 24, 28
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International application No

PCT/US2007/021503

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