

Title (en)
METHOD AND APPARATUS FOR DETERMINING HEART RATE VARIABILITY USING WAVELET TRANSFORMATION

Title (de)
VERFAHREN UND VORRICHTUNG ZUR BESTIMMUNG DER HERZFREQUENZVARIATION MITTELS WAVELET-TRANSFORMATION

Title (fr)
PROCÉDÉ ET APPAREIL DE DÉTERMINATION DE LA VARIABILITÉ DE LA FRÉQUENCE CARDIAQUE UTILISANT LA TRANSFORMATION EN ONDELETTES

Publication
EP 2375973 A4 20140212 (EN)

Application
EP 09836926 A 20091216

Priority

- US 2009068336 W 20091216
- US 12280408 P 20081216
- US 16728709 P 20090407
- US 2009006234 W 20091120

Abstract (en)
[origin: WO2010077997A2] The present invention relates to advanced signal processing methods including digital wavelet transformation to analyze heart-related electronic signals and extract features that can accurately identify various states of the cardiovascular system. The invention may be utilized to estimate the extent of blood volume loss, distinguish blood volume loss from physiological activities associated with exercise, and predict the presence and extent of cardiovascular disease in general.

IPC 8 full level
A61B 5/366 (2021.01)

CPC (source: EP)
A61B 5/0205 (2013.01); **A61B 5/02405** (2013.01); **A61B 5/366** (2021.01); **A61B 5/412** (2013.01); **A61B 5/7207** (2013.01); **A61B 5/7225** (2013.01); **A61B 5/726** (2013.01); **A61B 5/02208** (2013.01); **A61B 5/22** (2013.01); **A61B 5/6824** (2013.01); **A61B 5/721** (2013.01); **A61B 5/7239** (2013.01); **A61B 5/7267** (2013.01)

Citation (search report)

- [X] US 2002138014 A1 20020926 - BAURA GAIL D [US], et al
- [X] US 5827195 A 19981027 - LANDER PAUL [US]
- [X] SUBASI A ET AL: "Classification of EEG signals using neural network and logistic regression", COMPUTER METHODS AND PROGRAMS IN BIOMEDICINE, ELSEVIER, AMSTERDAM, NL, vol. 78, no. 2, 1 May 2005 (2005-05-01), pages 87 - 99, XP027784334, ISSN: 0169-2607, [retrieved on 20050501]
- See references of WO 2010077997A2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)
WO 2010077997 A2 20100708; WO 2010077997 A3 20101014; CA 2747057 A1 20100708; EP 2375973 A2 20111019; EP 2375973 A4 20140212

DOCDB simple family (application)
US 2009068336 W 20091216; CA 2747057 A 20091216; EP 09836926 A 20091216