Title (en)

METHOD AND DEVICE FOR FILTERING A SERIES OF CARDIAC RHYTHM SIGNALS (RR) DERIVED FROM A CARDIAC SIGNAL, AND MORE PARTICULARLY AN ECG SIGNAL

Title (de)

VERFAHREN UND ANLAGE ZUM FILTERN EINER RR SERIE EINES HERZSIGNALS, INSBESONDERE EINES EKG-SIGNALS

Title (fr)

PROCEDE ET DISPOSITIF DE FILTRAGE D'UNE SERIE RR ISSUE D'UN SIGNAL CARDIAQUE, ET PLUS PARTICULIEREMENT D'UN SIGNAL ECG

Publication

EP 1366428 A2 20031203 (FR)

Application

EP 02703688 A 20020211

Priority

- FR 0200513 W 20020211
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Abstract (en)

[origin: FR2821460A1] The invention concerns a method for filtering a RR series obtained after sampling an analog cardiac signal characterising the cardiac rhythm, and which consists of a plurality of samples (RRi) defining respectively the time intervals between two successive heart beats. The method consists in detecting and automatically filtering in the series (RR) the erroneous sample(s), and to detect whether a sample (RRi) is erroneous, the value of said sample (RRi) of the series is compared with at least a self-adaptive threshold which is calculated from (N) samples of the series (RR) in a sliding window. In particular, a self-adaptive detection threshold is calculated from the mean and the standard deviation (sigma) of the N samples in a sliding window.

IPC 1-7

G06F 17/00

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

See references of WO 02069178A2

Citation (examination)

- US 5630425 A 19970520 - PANESCU DORIN [US], et al
- ANDRÉ E. AUBERT ET AL: "The analysis of heart rate variability in unrestrained rats. Validation of method and results", COMPUTER METHODS AND PROGRAMS IN BIOMEDICINE., vol. 60, no. 3, 1 November 1999 (1999-11-01), NL, pages 197 - 213, XP055302114, ISSN: 0169-2607, DOI: 10.1016/S0169-2607(99)00017-6

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