

Title (en)

METHOD, COMPUTER PROGRAM, AND SYSTEM FOR AUTOMATED REAL-TIME SIGNAL ANALYSIS FOR DETECTION, QUANTIFICATION, AND PREDICTION OF SIGNAL CHANGES

Title (de)

VERFAHREN, COMPUTERPROGRAMM UND SYSTEM ZUR AUTOMATISIERTEN ECHTZEIT-SIGNALANALYSE ZUR ERKENNUNG, QUANTIFIZIERUNG UND VORHERSAGE VON SIGNALÄNDERUNGEN

Title (fr)

PROCEDE, PROGRAMME INFORMATIQUE ET SYSTEME DESTINE A L'ANALYSE AUTOMATISEE EN TEMPS REEL DE SIGNAUX EN VUE DE LA DETECTION, DE LA QUANTIFICATION ET DE LA PREVISION DE CHANGEMENTS DE SIGNAUX

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Application

EP 01923052 A 20010403

Priority

- US 0110677 W 20010403
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Abstract (en)

[origin: WO0175660A1] A method and system for real-time signal analysis providing characterization of temporally-evolving densities and distributions (26) of signal features of arbitrary-type signals (22) in a moving time window by tracking output of order statistic filters (28) (also known as percentile, quantile, or rank-order filters). Given a raw input signal of arbitrary type, origin, or scale, the present invention enables automated quantification and detection of changes in the distribution of any set of quantifiable features of that signal as they occur in time. Furthermore, the present invention's ability to rapidly and accurately detect changes in certain features of an input signal can also enable prediction in cases where the detected changes associated with an increased likelihood of future signal changes.

IPC 8 full level

G06F 17/18 (2006.01)

CPC (source: EP)

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Citation (search report)

- [X] OSORIO I ET AL: "REAL-TIME AUTOMATED DETECTION AND QUANTITATIVE ANALYSIS OF SEIZURES AND SHORT-TERM PREDICTION OF CLINICAL ONSET", EPILEPSIA, RAVEN PRESS LTD, NEW YORK, US, vol. 39, no. 6, 1 June 1998 (1998-06-01), pages 615 - 627, XP008012666, ISSN: 0013-9580, DOI: 10.1111/J.1528-1157.1998.TB01430.X
- See references of WO 0175660A1

Citation (examination)

NIKITIN A V ET AL: "Analog implementation of seizure detection algorithm", BMES/EMBS CONFERENCE, 1999. PROCEEDINGS OF THE FIRST JOINT ATLANTA, GA, USA 13-16 OCT. 1999, PISCATAWAY, NJ, USA, IEEE, US, vol. 2, 13 October 1999 (1999-10-13), pages 860, XP010357838, ISBN: 978-0-7803-5674-0, DOI: 10.1109/EMBS.1999.804015

Cited by

CZ302779B6; US11406317B2; US9898656B2; US9788744B2

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