

Title (en)

DEVICE AND METHOD FOR DETERMINING SLEEP PROFILES

Title (de)

ANORDNUNG UND VERFAHREN ZUR ERMITTLUNG VON SCHLAFPROFILIEN

Title (fr)

DISPOSITIF ET PROCEDE POUR LA DETERMINATION DE PROFILS DE SOMMEIL

Publication

EP 0957759 A1 19991124 (DE)

Application

EP 97948737 A 19971117

Priority

- DE 9702685 W 19971117
- DE 19649991 A 19961121

Abstract (en)

[origin: DE19649991A1] The invention relates to a device and a method for determining sleep profiles. The aim of the invention is to develop a device and a method which automatically generate a sleep stage classification with a grading of approximately 85 % (measured according to the crosscorrelation function between automatically and manually generated sleep profiles) with negligible discomfort to the sleeper caused by additional technical equipment in his or her ordinary environment. The inventive device is characterized in that an electrode strip with a preamplifier (active electrode) working on the basis of a single frontal EEG channel is placed symmetrical to the nose root and is connected to a measuring and analysis unit controlled by a microprocessor and working autonomously. The method is characterized in that the EEG signal is compressed according to characteristics, stored and transmitted to a computer after this preprocessing, and classification according to sleep stages occurs in the computer by means of a population of neuronal networks.

IPC 1-7

A61B 5/04

IPC 8 full level

A61B 5/0476 (2006.01)

CPC (source: EP US)

A61B 5/369 (2021.01 - EP); **A61B 5/372** (2021.01 - US); **A61B 5/4812** (2013.01 - EP US); **A61B 5/7264** (2013.01 - EP US); **A61B 5/7232** (2013.01 - EP US); **A61B 5/7267** (2013.01 - EP US); **G16H 50/20** (2017.12 - EP)

Citation (search report)

See references of WO 9822019A1

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB IE IT LI NL SE

DOCDB simple family (publication)

DE 19649991 A1 19980604; DE 19781294 D2 19991111; EP 0957759 A1 19991124; JP 2001503667 A 20010321; US 6272378 B1 20010807; WO 9822019 A1 19980528

DOCDB simple family (application)

DE 19649991 A 19961121; DE 19781294 T 19971117; DE 9702685 W 19971117; EP 97948737 A 19971117; JP 52307398 A 19971117; US 30851499 A 19990520