

Title (en)

TRANSCRANIAL CURRENT STIMULATION SYSTEM AND VIRTUAL REALITY FOR TREATMENT OF PTSD OR FEARS

Title (de)

SYSTEM ZUR TRANSKRANIALEN STROMSTIMULATION UND VIRTUELLE REALITÄT ZUR BEHANDLUNG VON PTSD ODER ÄNGSTEN

Title (fr)

SYSTÈME DE STIMULATION TRANSCRÂNIENNE PAR COURANT ET RÉALITÉ VIRTUELLE POUR LE TRAITEMENT D'ESPT OU DE PEURS

Publication

**EP 3600532 A4 20210106 (EN)**

Application

**EP 18775894 A 20180118**

Priority

- US 201762478538 P 20170329
- US 201762516350 P 20170607
- US 2018014294 W 20180118

Abstract (en)

[origin: WO2018182825A1] Described is a system for treating traumatic memories. During a wake stage, a virtual environment is displayed to a subject. A traumatic episode that may be similar to a traumatic memory of the subject is displayed to the user in the virtual environment in a benign setting. A transcranial current stimulation (tCS) controller applies a pattern of transcranial direct current stimulation (tDCS) to the subject during the traumatic episode, such that the traumatic memory in a benign setting is associated with the pattern of tDCS. During a sleep stage, if slow-wave sleep in the subject is detected via electroencephalogram (EEG) recordings, then in a first time period, the tCS controller may a transcranial alternating current stimulation (tACS) to the subject followed by a second time period without stimulation, in a third time period, the tCS controller may apply the pattern of tDCS to the subject. The sleep stage may be repeated until a desired weakening of the traumatic memory is reached.

IPC 8 full level

**A61M 21/02** (2006.01); **A61N 1/04** (2006.01); **A61N 1/36** (2006.01)

CPC (source: EP)

**A61B 5/369** (2021.01); **A61M 21/02** (2013.01); **A61N 1/36025** (2013.01); **A61N 1/36031** (2017.07); **A61M 2021/0027** (2013.01);  
**A61M 2021/005** (2013.01); **A61M 2021/0072** (2013.01); **A61M 2205/507** (2013.01); **A61M 2205/52** (2013.01); **A61M 2230/10** (2013.01);  
**A61N 1/0456** (2013.01); **A61N 1/0476** (2013.01)

Citation (search report)

- [A] WO 2015153675 A1 20151008 - STUBBEMAN WILLIAM F [US]
- [A] US 8838247 B2 20140916 - HAGEDORN DAVID W [US], et al
- [A] US 8938301 B2 20150120 - HAGEDORN DAVID W [US]
- [A] GB 2541947 A 20170308 - CERESTIM LTD [GB]
- [A] A. THIBAUT ET AL: "tDCS in patients with disorders of consciousness: Sham-controlled randomized double-blind study", NEUROLOGY, 26 February 2014 (2014-02-26), XP055105106, ISSN: 0028-3878, DOI: 10.1212/WNL.0000000000000260
- See references of WO 2018182825A1

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

DOCDB simple family (publication)

**WO 2018182825 A1 20181004**; CN 110325242 A 20191011; CN 110325242 B 20230627; EP 3600532 A1 20200205; EP 3600532 A4 20210106

DOCDB simple family (application)

**US 2018014294 W 20180118**; CN 201880013919 A 20180118; EP 18775894 A 20180118