

Title (en)  
ENHANCED TRANSCUTANEOUS ELECTRICAL NERVE STIMULATOR WITH AUTOMATIC DETECTION OF LEG ORIENTATION AND MOTION FOR ENHANCED SLEEP ANALYSIS

Title (de)  
VERSTÄRKTER TRANSKUTANER ELEKTRISCHER NERVENSTIMULATOR MIT AUTOMATISCHER ERMITTLUNG DER BEINAUSRICHTUNG UND BEWEGUNG FÜR VERBESSERTE SCHLAFANALYSE

Title (fr)  
NEUROSTIMULATEUR ÉLECTRIQUE TRANSCUTANÉ À DÉTECTION AUTOMATIQUE DE L'ORIENTATION ET DES MOUVEMENTS DES JAMBES UTILISABLE EN VUE D'UNE MEILLEURE ANALYSE DU SOMMEIL ET NEUROSTIMULATION ÉLECTRIQUE TRANSCUTANÉE (TENS) AMÉLIORÉE L'UTILISANT

Publication  
**EP 3242715 A4 20180926 (EN)**

Application  
**EP 15877354 A 20151228**

Priority  
• US 201562101029 P 20150108  
• US 201514610757 A 20150130  
• US 201514794588 A 20150708  
• US 201562213978 P 20150903  
• US 2015067606 W 20151228

Abstract (en)  
[origin: WO2016111863A1] Apparatus for providing transcutaneous electrical nerve stimulation (TENS) therapy to a user, the apparatus comprising: a housing; an application unit for providing mechanical coupling between the housing and the user's body; a stimulation unit for electrically stimulating at least one nerve of the user; a sensing unit for sensing the user's body movement and body orientation; and a reporting unit for providing the user with feedback based on the user's sensed body movement and body orientation.

IPC 8 full level  
**A61N 1/36** (2006.01); **A61B 5/00** (2006.01); **A61B 5/11** (2006.01)

CPC (source: EP)  
**A61B 5/1114** (2013.01); **A61B 5/1118** (2013.01); **A61B 5/4815** (2013.01); **A61B 5/6828** (2013.01); **A61N 1/0456** (2013.01); **A61N 1/0484** (2013.01); **A61N 1/36021** (2013.01); **A61N 1/36031** (2017.07)

Citation (search report)  
• [XA] US 2004122483 A1 20040624 - NATHAN ROGER H [IL], et al  
• [XA] US 2008147143 A1 20080619 - POPOVIC DEJAN [YU], et al  
• See references of WO 2016111863A1

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 2016111863 A1 20160714**; CN 107614054 A 20180119; CN 107614054 B 20211210; EP 3242715 A1 20171115; EP 3242715 A4 20180926; JP 2018502642 A 20180201; JP 6769967 B2 20201014

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**US 2015067606 W 20151228**; CN 201580077586 A 20151228; EP 15877354 A 20151228; JP 2017535657 A 20151228