

Title (en)

HUMAN CEREBRAL CORTEX NEURAL PROSTHETIC

Title (de)

MENSCHLICHE GROSSHIRNRINDENNERVENPROTHESE

Title (fr)

PROTHESE NEURONALE DESTINEE AU CORTEX CEREBRAL HUMAIN

Publication

EP 0743839 A4 19990210 (EN)

Application

EP 95910167 A 19950209

Priority

- US 9501391 W 19950209
- US 19401794 A 19940209
- US 33275794 A 19941101
- US 33275594 A 19941101

Abstract (en)

[origin: WO9521591A1] A neural prosthetic device (100') for a primary auditory cortex (150') of a patient includes a support (108') arranged in said primary auditory cortex having a plurality of electrical contacts (104') which output electrical discharges in accordance with processed electrical signals. The device can enable certain types of hearing impaired patients to hear. One version of the device can be wireless. A neural prosthetic device, which may or may not be wireless, can also be modified to reduce or eliminate the effects of tinnitus. In version, a catheter microinfuses drugs which suppress or eliminate abnormal neural activity.

IPC 1-7

A61F 2/02

IPC 8 full level

A61F 2/02 (2006.01); **A61F 11/00** (2006.01); **A61F 11/04** (2006.01); **A61N 1/05** (2006.01); **A61N 1/32** (2006.01); **A61N 1/36** (2006.01)

CPC (source: EP US)

A61F 11/04 (2013.01 - EP); **A61N 1/05** (2013.01 - EP); **A61N 1/0529** (2013.01 - EP); **A61N 1/0531** (2013.01 - EP);
A61N 1/0539 (2013.01 - EP US); **A61N 1/0541** (2013.01 - EP); **A61N 1/361** (2013.01 - EP)

Citation (search report)

- [A] EP 0124930 A1 19841114 - COMMW OF AUSTRALIA [AU]
- [A] WO 9207605 A1 19920514 - RAVI XAVIER [US]
- [A] WO 9401166 A1 19940120 - UNIV BROWN RES FOUND [US], et al
- [A] US 4735968 A 19880405 - GUTH PAUL S [US]
- [AD] DOBELL W.H. ET AL: "A prosthesis for the deaf based on cortical stimulation", ANNALS OF OTOLOGY, RHINOLOGY AND LARYNGOLOGYAD., vol. 82, 1973, pages 445 - 463, XP002079662
- [A] IFUKUBE T ET AL: "DESIGN OF AN IMPLANTABLE TINNITUS SUPPRESSOR BY ELECTRICAL COCHLEAR STIMULATION", BIOMECHANICS, REHABILITATION, ELECTRICAL PHENOMENA, BIOMATERIALS, SAN DIEGO, OCT. 28 - 31, 1993, vol. 3, no. CONF. 15, 28 October 1993 (1993-10-28), SZETO A;RANGARAJ M RANGAYYAN, pages 1349/1350, XP000452886
- See references of WO 9521591A1

Cited by

US10966620B2; US9889304B2; US9604055B2; US11311718B2; US10695556B2; US11766560B2; US10166392B2; US10406350B2;
US10952627B2; US11123548B2; US9925376B2; US10201707B2; US11266830B2; US11738192B2; US10065031B2; US10441779B2;
US11167126B2; US11730953B2

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

WO 9521591 A1 19950817; AU 1837695 A 19950829; EP 0743839 A1 19961127; EP 0743839 A4 19990210; JP H09508553 A 19970902

DOCDB simple family (application)

US 9501391 W 19950209; AU 1837695 A 19950209; EP 95910167 A 19950209; JP 52126195 A 19950209