

Title (en)  
MICROFLUIDIC DEVICES AND METHODS FOR THE DEVELOPMENT OF NEURAL TUBE-LIKE TISSUES OR NEURAL SPHEROIDS

Title (de)  
MIKROFLUIDISCHE VORRICHTUNGEN UND VERFAHREN ZUR ENTWICKLUNG VON NEURALROHRARTIGEN GEWEBEN ODER NEURALEN SPHÄROIDEN

Title (fr)  
DISPOSITIFS MICROFLUIDIQUES ET PROCÉDÉS DE DÉVELOPPEMENT DE TISSUS DU TYPE TUBE NEURAL OU SPHÉROÏDES NEURAUX

Publication  
**EP 4240279 A1 20230913 (EN)**

Application  
**EP 21890078 A 20211104**

Priority  
• US 202063109407 P 20201104  
• US 2021058090 W 20211104

Abstract (en)  
[origin: WO2022098895A1] The present disclosure provides devices and in vitro methods of developing three-dimensional neural tube-like tissues. In some aspects, the disclosure provides devices and methods of developing three-dimensional neural tube-like tissues comprising forebrain-like, midbrain-like, hindbrain-like, and spinal cord-like tissues. In particular, provided herein microfluidic devices and methods of using the same for generating neural tube-like tissues, such as neural-tube like tissues comprising forebrain-like, midbrain-like, hindbrain-like, and spinal cord-like tissues. In some embodiments, uses of such neural tube-like tissues for research, compound screening and analysis, disease modeling, and therapeutics are provided.

IPC 8 full level  
**A61F 2/04** (2013.01); **A61F 2/07** (2013.01); **A61K 35/30** (2015.01); **B01L 3/00** (2006.01); **C12N 5/00** (2006.01); **F04B 43/02** (2006.01); **F04B 43/08** (2006.01)

CPC (source: EP)  
**A61K 35/30** (2013.01); **C12N 5/0068** (2013.01); **C12N 5/0618** (2013.01); **C12N 5/0697** (2013.01); **C12N 2513/00** (2013.01); **C12N 2535/00** (2013.01)

Citation (search report)  
See references of WO 2022098895A1

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

Designated extension state (EPC)  
BA ME

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
**WO 2022098895 A1 20220512**; EP 4240279 A1 20230913

DOCDB simple family (application)  
**US 2021058090 W 20211104**; EP 21890078 A 20211104