

Title (en)
SINGLE-SHEATH MICROFLUIDIC CHIP

Title (de)
EINSCHICHTIGER MIKROFLUIDISCHER CHIP

Title (fr)
PUCE MICROFLUIDIQUE À GAINÉ UNIQUE

Publication
EP 4090932 A4 20231018 (EN)

Application
EP 20913158 A 20200113

Priority
US 2020013392 W 20200113

Abstract (en)
[origin: WO2021145854A1] Microfluidic devices and methods for focusing components in a fluid sample are described herein. The microfluidic devices feature a microfluidic chip having a micro-channel having a constricting portion that narrows in width, and a flow focusing region downstream of the micro-channel. The flow focusing region includes a positively sloping bottom surface that reduces a height of the flow focusing region and sidewalls that taper to reduce a width of the flow focusing region, thereby geometrically constricting the flow focusing region. The devices and methods can be utilized in sex-sorting of sperm cells to improve performance and increase eligibility.

IPC 8 full level
G01N 1/20 (2006.01); **A61D 19/02** (2006.01); **A61K 35/52** (2015.01); **B01L 3/00** (2006.01); **C12M 1/00** (2006.01); **C12M 3/00** (2006.01); **C12N 5/00** (2006.01); **G01N 15/00** (2006.01); **G01N 15/06** (2006.01); **G01N 15/10** (2006.01); **G01N 15/14** (2006.01); **G01N 21/64** (2006.01)

CPC (source: EP)
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Citation (search report)
• [X] US 2019187044 A1 20190620 - APPELYARD DAVID [US], et al
• See references of WO 2021145854A1

Designated contracting state (EPC)
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DOCDB simple family (publication)
WO 2021145854 A1 20210722; BR 112022012881 A2 20220906; CN 115023599 A 20220906; EP 4090932 A1 20221123; EP 4090932 A4 20231018; JP 2023514941 A 20230412

DOCDB simple family (application)
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