Title (en)
    DRIVER AND CONTROL FOR VARIABLE IMPEDANCE LOAD

Title (de)
    TREIBER UND STEUERUNG FÜR LAST MIT VARIABLER IMPEDANZ

Title (fr)
    PILOTE ET COMMANDE DE CHARGE À IMPÉDANCE VARIABLE

Publication
    EP 3658909 A4 20210908 (EN)

Application
    EP 18817634 A 20180613

Priority
- US 201715621691 A 20170613
- US 201815872984 A 20180116
- US 2018037420 W 20180613

Abstract (en)
    [origin: WO2018232045A1] An acoustic standing wave is utilized to separate components from a multi- component fluid, such as oil from an oil-water mixture, or cells entrained in a fluid, in a fluid flow scheme with an acoustophoresis device. For example, the flow scheme and device allow for trapping of the oil as the oil coalesces, agglomerates, and becomes more buoyant than the water. A driver and controller for the acoustophoretic device accommodate variable loading as the components are separated, thereby improving separation efficiency.

IPC 8 full level
    G01N 29/34 (2006.01); **A61M 1/36** (2006.01); **B01D 17/00** (2006.01); **B01D 21/28** (2006.01); **B06B 1/02** (2006.01); **B06B 1/06** (2006.01); **C12M 1/00** (2006.01); **C12N 13/00** (2006.01); **G01R 21/06** (2006.01)

CPC (source: EP)
    A61M 1/3678 (2014.02); **B01D 17/00** (2013.01); **B01D 21/283** (2013.01); **B01D 21/30** (2013.01); **B06B 1/0261** (2013.01); **B06B 1/0644** (2013.01); **C12M 47/04** (2013.01); **C12N 13/00** (2013.01); **G10K 15/02** (2013.01); B01D 2221/10 (2013.01); C02F 1/008 (2013.01); C02F 1/36 (2013.01)

Citation (search report)
- [XY] US 4401943 A 19830830 - MORRIS DONALD G [US]
- [XYI] WO 2014029505 A1 20140227 - ETH ZUERICH [CH]
- [Y] US 2013277316 A1 20131024 - DUTRA BRIAN [US], et al
- [Y] GB 2099594 A 19821208 - HILBRE ULTRASONICS LTD
- [Y] EP 2453670 A1 20120516 - NXP BV [NL]
- See references of WO 2018232045A1

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 2018232045 A1 20181220; AU 2018284857 A1 20201015; AU 2022201510 A1 20220324; AU 2022201510 B2 20240201; CA 3082582 A1 20181220; CN 111373253 A 20200703; EP 3658909 A1 20200603; EP 3658909 A4 20210908; SG 11202003714R A 20200528

DOCDB simple family (application)
    US 2018037420 W 20180613; AU 2018284857 A 20180613; AU 2022201510 A 20220304; CA 3082582 A 20180613; CN 201880052720 A 20180613; EP 18817634 A 20180613; SG 11202003714R A 20180613