

Title (en)
FLOATING BIOREACTOR

Title (de)
SCHWIMMENDER BIOREAKTOR

Title (fr)
BIORÉACTEUR FLOTTANT

Publication
EP 3448816 A4 20191002 (EN)

Application
EP 17790008 A 20170329

Priority
• SE 1650586 A 20160429
• SE 2017050304 W 20170329

Abstract (en)
[origin: WO2017188875A1] The present invention relates to a mobile, floating biofilm bioreactor for wastewater treatment, comprising a frame having an upper portion and a lower portion, at least one buoyant member attached to the upper portion of the frame such that the bioreactor remains afloat when submerged into wastewater, an aerator comprising, an air dispensing device arranged at the lower end of the rigid frame, a biofilm support media attached to the frame below the at least one buoyant member, wherein the biofilm support media comprises pipes having perforated walls arranged in an upright position alongside each other, said pipes forming a planar biofilm platform having an upper side and a lower side,, said air dispensing device comprises a collar for provision of a desired distribution pattern of air bubbles, positioned in connection to the lower side of the biofilm platform.

IPC 8 full level
C02F 3/06 (2006.01); **B01F 23/233** (2022.01); **B01F 33/503** (2022.01); **C02F 3/10** (2006.01); **C02F 3/16** (2006.01); **C02F 3/30** (2006.01)

CPC (source: EP SE)
B01F 23/23311 (2022.01 - EP); **B01F 23/2334** (2022.01 - SE); **B01F 33/503** (2022.01 - EP); **C02F 3/06** (2013.01 - EP SE); **C02F 3/101** (2013.01 - EP); **C02F 3/165** (2013.01 - EP); **C02F 3/302** (2013.01 - EP); **C02F 2203/008** (2013.01 - EP); **Y02W 10/10** (2015.05 - EP); **Y02W 10/37** (2015.05 - EP)

Citation (search report)
• [I] JP S57131897 U 19820817
• [I] US 4439316 A 19840327 - KOZIMA SADA O [JP], et al
• [I] US 5326475 A 19940705 - KENT DANA M [US]
• [I] US 2012228216 A1 20120913 - GAVRIELI JONAH [IL], et al
• [A] AU 2011318244 A1 20130523 - EVERHARD IND PTY LTD
• See references of WO 2017188875A1

Cited by
CN115657459A

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 2017188875 A1 20171102; EP 3448816 A1 20190306; EP 3448816 A4 20191002; SE 1650586 A1 20170926; SE 539465 C2 20170926

DOCDB simple family (application)
SE 2017050304 W 20170329; EP 17790008 A 20170329; SE 1650586 A 20160429