

Title (en)  
OLEFIN HYDRATION PROCESS USING OSCILLATORY BAFFLED REACTOR

Title (de)  
OLEFINHYDRIERUNGSVERFAHREN MITHILFE EINES OSZILLIERENDEN, MIT PRALLBLECHEN VERSEHENEN REAKTORS

Title (fr)  
PROCÉDÉ D'HYDRATATION D'OLÉFINES À L'AIDE D'UN RÉACTEUR À CHICANES OSCILLANTES

Publication  
**EP 3359514 A1 20180815 (EN)**

Application  
**EP 16785629 A 20161007**

Priority  
• US 201514879601 A 20151009  
• US 2016056015 W 20161007

Abstract (en)  
[origin: WO2017062783A1] A butanol production system and method for producing refined mixed butanols includes an internal baffle single pass reactor having an internal fluid conduit defined by an internal wall. The internal fluid conduit contains a process fluid comprising water, mixed butenes and mixed butanols, to form a crude product. Internal flow baffles are located along a length of the internal fluid conduit. Baffled cells are defined at an outer diameter by the internal wall and at ends by the internal flow baffles. A separation system separates water and mixed butenes from the crude product to produce refined mixed butanols. An oscillator assembly is coupled to the internal baffle single pass reactor and has a reciprocating oscillator head selectively movable in a back and forth linear motion, and in communication with the process fluid such that the process fluid undergoes a general sinusoidal movement along the internal baffle single pass reactor.

IPC 8 full level  
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CPC (source: EP KR)  
**B01J 19/006** (2013.01 - EP KR); **B01J 19/0066** (2013.01 - KR); **B01J 19/0073** (2013.01 - KR); **B01J 19/1806** (2013.01 - KR); **B01J 19/185** (2013.01 - EP); **C07C 29/04** (2013.01 - EP KR); **C07C 31/12** (2013.01 - KR); **B01J 2219/00765** (2013.01 - EP); **Y02P 20/582** (2015.11 - EP)

Citation (search report)  
See references of WO 2017062783A1

Cited by  
CN109179321A

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

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**US 2016056015 W 20161007**; CN 201680058988 A 20161007; EP 16785629 A 20161007; JP 2018517806 A 20161007; JP 2020101039 A 20200610; KR 20187012493 A 20161007; SA 518391110 A 20180313