

Title (en)
METHOD FOR SEPARATING WATER FROM A GASEOUS WORKING MEDIUM, AND WATER SEPARATOR FOR A WORKING MEDIUM

Title (de)
VERFAHREN ZUM ABSCHIEDEN VON WASSER AUS EINEM GASFÖRMIGEN ARBEITSMEDIUM SOWIE EIN WASSERABSCHIEDER FÜR EIN ARBEITSMEDIUM

Title (fr)
PROCÉDÉ DE RÉCUPÉRATION D'EAU PAR SÉPARATION D'UN FLUIDE DE TRAVAIL GAZEUX ET SÉPARATEUR D'EAU DESTINÉ À UN FLUIDE DE TRAVAIL

Publication
EP 3227002 A1 20171011 (DE)

Application
EP 15805392 A 20151201

Priority
• DE 102014017966 A 20141204
• EP 2015002413 W 20151201

Abstract (en)
[origin: WO2016087039A1] The invention relates to a method for separating water from a gaseous working medium (2), at least the following steps being carried out: providing an ionic hygroscopic liquid (4) in a reaction chamber (3); supplying the water-containing working medium (2) and conducting the working medium (2) through the ionic liquid (4), wherein water bonds with the ionic liquid (4) and is thereby separated from the working medium; and discharging the dried working medium (7). The invention further relates to a corresponding water separator (1) and to a water separator system (15).

IPC 8 full level
B01D 53/14 (2006.01); **B01D 53/18** (2006.01); **B01D 53/26** (2006.01); **C10L 3/10** (2006.01)

CPC (source: EP KR US)
B01D 46/0031 (2013.01 - US); **B01D 46/0036** (2013.01 - US); **B01D 53/1412** (2013.01 - EP KR US); **B01D 53/1425** (2013.01 - EP KR US); **B01D 53/1493** (2013.01 - EP KR US); **B01D 53/18** (2013.01 - EP KR US); **B01D 53/263** (2013.01 - EP KR US); **B01D 53/28** (2013.01 - US); **C01B 3/50** (2013.01 - US); **C10L 3/106** (2013.01 - EP KR US); **B01D 2252/30** (2013.01 - EP KR US); **C01B 2203/0415** (2013.01 - US); **C01B 2203/0495** (2013.01 - US); **C10L 2290/06** (2013.01 - EP KR US); **C10L 2290/08** (2013.01 - US); **C10L 2290/12** (2013.01 - EP KR US); **C10L 2290/541** (2013.01 - EP KR US); **C10L 2290/547** (2013.01 - EP KR US); **C10L 2290/58** (2013.01 - EP US); **C10L 2290/60** (2013.01 - EP US)

Citation (search report)
See references of WO 2016087039A1

Citation (examination)
• DE 102011121012 A1 20130613 - LINDE AG [DE]
• US 2014314659 A1 20141023 - BECKER CHRISTOPHER L [US], et al
• EP 0211659 A2 19870225 - DOW CHEMICAL CO [US]

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

DOCDB simple family (publication)
WO 2016087039 A1 20160609; AU 2015357759 A1 20170622; DE 102014017966 A1 20160609; EP 3227002 A1 20171011; JP 2017538571 A 20171228; KR 20170091146 A 20170808; US 2018290102 A1 20181011

DOCDB simple family (application)
EP 2015002413 W 20151201; AU 2015357759 A 20151201; DE 102014017966 A 20141204; EP 15805392 A 20151201; JP 2017529678 A 20151201; KR 20177018363 A 20151201; US 201515531555 A 20151201