

Title (en)
CONDENSATION AND WASHING DEVICE, POLYMERISATION DEVICE AND METHOD FOR CLEANING PROCESS STEAM DURING THE PRODUCTION OF POLYLACTIDE

Title (de)
KONDENSATIONS- UND WASCHVORRICHTUNG, POLYMERISATIONSVORRICHTUNG SOWIE VERFAHREN ZUR REINIGUNG VON PROZESSDÄMPFEN BEI DER POLYLACTIDHERSTELLUNG

Title (fr)
DISPOSITIF DE CONDENSATION ET DE LAVAGE, DISPOSITIF DE POLYMÉRISATION ET PROCÉDÉ POUR PURIFIER DES VAPEURS INDUSTRIELLES LORS DE LA PRODUCTION DE POLYLACTIDE

Publication
EP 2200733 A1 20100630 (DE)

Application
EP 08785357 A 20080805

Priority
• EP 2008006432 W 20080805
• EP 07017233 A 20070903
• EP 08785357 A 20080805

Abstract (en)
[origin: EP2030667A1] Condensation and washing device (1), comprises: (a) a sump container (2) containing a condensation- and a washing liquid (3); (b) at least one column (6) that is attached to the sump container, where the column exhibits at least a material exchange packing (7); (c) at least an inlet (8) for process vapor, which is arranged under the material exchange packing of the column; and (d) at least one outlet arranged above the material exchange packing of the column for process vapor. Condensation and washing device (1), comprises: (a) a sump container (2) containing a condensation- and a washing liquid (3), where the sump container exhibits at least a drain conduit (5); (b) at least one column (6) that is attached to the sump container, where the column exhibits at least a material exchange packing (7) that is at least partly filling the cross section of the column; (c) at least an inlet (8) for process vapor, which is arranged under the material exchange packing of the column; and (d) at least one outlet arranged above the material exchange packing of the column for process vapor, where the drain conduit of the sump container is connected with the column for the circulation of the condensation and washing liquid over a pipe line (10) and the entrance of the pipe line is arranged above the material exchange packing in the column. Independent claims are included for: (1) a polymerization device for the polymerization of a biodegradable, intermolecular cyclic diesters of an alpha hydroxy carboxylic acid of formula (II), comprising the condensation device; and (2) a procedure for the condensation and/or washing of a vaporous biodegradable, intermolecular cyclic diesters of an alpha hydroxy carboxylic acid (II), from a vapor mixture containing the diester (II), the alpha hydroxy acid of formula (I) corresponding to diester (II) and water comprising contacting a stream of a condensation and a washing liquid containing an aqueous solution of (I) corresponding to (II) with the vapor mixture, where the diester (II) containing in the vapor mixture is dissolved in the condensation and washing liquid. R, R 1> : hydrogen or linear or branched 1-6C aliphatic residues. [Image].

IPC 8 full level
B01D 53/14 (2006.01); **C07D 319/12** (2006.01); **C08G 63/08** (2006.01)

CPC (source: EP US)
B01D 5/0057 (2013.01 - US); **B01D 53/1487** (2013.01 - EP US); **B01D 53/1493** (2013.01 - EP US); **C07D 319/12** (2013.01 - EP US); **C08G 63/785** (2013.01 - EP US); **C08G 63/08** (2013.01 - EP US)

Citation (search report)
See references of WO 2009030330A1

Cited by
US10098386B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
EP 2030667 A1 20090304; EP 2030667 B1 20110316; AT E501778 T1 20110415; BR PI0816187 A2 20150414; BR PI0816187 B1 20190205; CA 2698286 A1 20090312; CA 2698286 C 20171024; CN 101820970 A 20100901; CN 101820970 B 20130327; DE 502007006729 D1 20110428; EP 2200733 A1 20100630; ES 2359086 T3 20110518; KR 101180512 B1 20120906; KR 20100049690 A 20100512; MX 2010002431 A 20100331; RU 2010107422 A 20111010; RU 2471791 C2 20130110; TW 200918151 A 20090501; TW 201434522 A 20140916; TW I481443 B 20150421; TW I548444 B 20160911; US 2010252076 A1 20101007; US 2013236366 A1 20130912; US 8430948 B2 20130430; US 8702852 B2 20140422; WO 2009030330 A1 20090312; ZA 201001399 B 20101027

DOCDB simple family (application)
EP 07017233 A 20070903; AT 07017233 T 20070903; BR PI0816187 A 20080805; CA 2698286 A 20080805; CN 200880111394 A 20080805; DE 502007006729 T 20070903; EP 08785357 A 20080805; EP 2008006432 W 20080805; ES 07017233 T 20070903; KR 20107007351 A 20080805; MX 2010002431 A 20080805; RU 2010107422 A 20080805; TW 103118915 A 20080808; TW 97130171 A 20080808; US 201313872198 A 20130429; US 67626208 A 20080805; ZA 201001399 A 20100225