Title (en)
CONTINUOUS METHOD FOR PREPARING ETHYL LACTATE

Title (de)
KONTINUIERLICHES VERFAHREN ZUR HERSTELLUNG VON ETHYLLACTAT

Title (fr)
PROCEDE CONTINU DE PREPARATION DE LACTATE D ETHYLE

Publication
EP 1581473 A2 20051005 (FR)

Application
EP 03796170 A 20031205

Priority
• FR 0303599 W 20031205
• FR 0215347 A 20021205

Abstract (en)
[origin: FR2848208A1] Continuous production of ethyl lactate by esterifying lactic acid with ethanol comprises continuously removing a near-azeotropic water-ethanol gas mixture, drying the mixture with a molecular sieve to produce a gaseous ethanol stream, water-ethanol stream and a water-ethanol azeotrope which is injected into the top of the distillation column; and continuously withdrawing crude ethyl lactate and purifying it. Continuous production of ethyl lactate by esterifying lactic acid with ethanol in an initial ethanol/lactic acid molar ratio of at least 2.5 in the presence of a catalyst at reflux temperature of 100 degrees C and an absolute pressure of 1.5-3 bar comprises continuously removing a near-azeotropic water-ethanol gas mixture, drying the mixture with a molecular sieve to produce a gaseous ethanol stream (which can be recycled to the esterification reaction mixture) and a water-ethanol stream which is distilled to obtain water and a water-ethanol azeotrope which is injected into the top of the distillation column; and continuously withdrawing crude ethyl lactate and purifying it.

IPC 1-7
C07C 67/08

IPC 8 full level
C07C 67/08 (2006.01)

CPC (source: EP KR US)
C07C 67/08 (2013.01 - EP KR US); **C07C 67/62** (2013.01 - KR); **C07C 69/68** (2013.01 - KR)

Citation (search report)
See references of WO 2004052826A2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
FR 2848208 A1 20040611; **FR 2848208 B1 20050114**; AU 2003298422 A1 20040630; AU 2003298422 B2 20061123; BR 0317055 A 20051025; CA 2507916 A1 20040624; CN 1326826 C 20070718; CN 1723187 A 20060118; EP 1581473 A2 20051005; JP 2006509025 A 20060316; KR 100698817 B1 20070323; KR 20050085397 A 20050829; MX PA05005961 A 20060127; US 2006014976 A1 20060119; US 7297809 B2 20071120; WO 2004052826 A2 20040624; WO 2004052826 A3 20040902

DOCDB simple family (application)
FR 0215347 A 20021205; AU 2003298422 A 20031205; BR 0317055 A 20031205; CA 2507916 A 20031205; CN 200380104918 A 20031205; EP 03796170 A 20031205; FR 0303599 W 20031205; JP 2004558174 A 20031205; KR 20057010227 A 20050604; MX PA05005961 A 20031205; US 53715005 A 20050602