

Title (en)
ACID CLEANING METHOD IN THE BREWING INDUSTRY

Title (de)
SÄUREREINIGUNGSVERFAHREN FÜR DIE BRAUINDUSTRIE

Title (fr)
PROCEDE DE NETTOYAGE ACIDE DANS L'INDUSTRIE BRASSICOLE

Publication
EP 2217691 B2 20201118 (FR)

Application
EP 08855377 A 20081112

Priority

- FR 2008052032 W 20081112
- FR 0759056 A 20071115
- FR 0759474 A 20071130

Abstract (en)
[origin: JP2009119445A] <P>PROBLEM TO BE SOLVED: To provide an acid cleaning method in beer industry, in particular, improved acid cleaning of various components and a container used for making beer or other related carbonated beverages. <P>SOLUTION: The acid cleaning is performed with effective amount of a compound containing at least one kind of alkanesulfonic acid. <P>COPYRIGHT: (C)2009,JPO&INPIT

IPC 8 full level
C11D 11/00 (2006.01); **C11D 1/14** (2006.01); **C11D 3/34** (2006.01); **C11D 7/34** (2006.01)

CPC (source: CN EP US)
B08B 3/02 (2013.01 - CN); **B08B 3/08** (2013.01 - CN); **B08B 9/027** (2013.01 - US); **B08B 9/0804** (2013.01 - US); **C11D 1/14** (2013.01 - CN US); **C11D 1/143** (2013.01 - EP US); **C11D 3/3409** (2013.01 - EP US); **C11D 7/34** (2013.01 - EP US); **C11D 2111/20** (2024.01 - EP US)

Citation (opposition)
Opponent :

- WO 0210325 A1 20020207 - HENKEL ECOLAB GMBH & CO OHG [DE]
- EP 0271791 A2 19880622 - HENKEL KGAA [DE]
- DE 69217516 T2 19970911 - CFPI IND [FR]
- EP 0395902 A2 19901107 - SCHUELKE & MAYR GMBH [DE]

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

DOCDB simple family (publication)
FR 2923735 A1 20090522; AP 2010005273 A0 20100630; AP 3357 A 20150731; AR 069332 A1 20100113; AU 2008328623 A1 20090604; AU 2008328623 B2 20120419; AU 2008328623 B9 20120503; BR PI0819324 A2 20150512; CA 2704218 A1 20090604; CA 2704218 C 20150414; CN 101861380 A 20101013; CN 105779145 A 20160720; DK 2217691 T3 20150302; DK 2217691 T4 20210215; EA 018739 B1 20131030; EA 201070606 A1 20101029; EP 2217691 A2 20100818; EP 2217691 B1 20150114; EP 2217691 B2 20201118; ES 2528725 T3 20150212; ES 2528725 T5 20210924; FR 2923736 A1 20090522; FR 2923736 B1 20091120; HR P20150392 T1 20150522; HR P20150392 T4 20210514; IN 3262DEN2010 A 20101015; JP 2009119445 A 20090604; JP 2015070841 A 20150416; JP 2017035694 A 20170216; JP 6013425 B2 20161025; MX 2010004911 A 20100527; PL 2217691 T3 20150430; PL 2217691 T5 20210419; PT 2217691 E 20150209; SI 2217691 T1 20150529; SI 2217691 T2 20210331; TW 200936751 A 20090901; TW I395812 B 20130511; US 10889781 B2 20210112; US 2009139546 A1 20090604; US 2013192649 A1 20130801; US 8425688 B2 20130423; WO 2009068810 A2 20090604; WO 2009068810 A3 20090820; ZA 201002950 B 20110727

DOCDB simple family (application)
FR 0759056 A 20071115; AP 2010005273 A 20081112; AR P080104985 A 20081114; AU 2008328623 A 20081112; BR PI0819324 A 20081112; CA 2704218 A 20081112; CN 200880116220 A 20081112; CN 201610089659 A 20081112; DK 08855377 T 20081112; EA 201070606 A 20081112; EP 08855377 A 20081112; ES 08855377 T 20081112; FR 0759474 A 20071130; FR 2008052032 W 20081112; HR P20150392 T 20150407; IN 3262DEN2010 A 20100510; JP 2007310231 A 20071130; JP 2014219297 A 20141028; JP 2016181463 A 20160916; MX 2010004911 A 20081112; PL 08855377 T 20081112; PT 08855377 T 20081112; SI 200831418 T 20081112; TW 97143599 A 20081112; US 201313799242 A 20130313; US 27093708 A 20081114; ZA 201002950 A 20100428