

Title (en)

Method and device for simultaneously cleaning a plurality of pipelines or pipeline systems

Title (de)

Verfahren und Vorrichtung zum gleichzeitigen Reinigen mehrerer Rohrleitungen oder Rohrleitungssysteme

Title (fr)

Procédé et dispositif de nettoyage simultané d'une pluralité de tuyaux ou systèmes de tuyaux

Publication

EP 1990104 B2 20151028 (DE)

Application

EP 08103936 A 20080513

Priority

DE 102007022798 A 20070511

Abstract (en)

[origin: EP1990104A2] The method involves extracting a liquid cleaning medium from a collecting tank (1) by a feeding pump (2), and supplying the cleaning medium to to-be-cleaned pipeline systems (A, B, B '). A cleaning medium stream (TS2) is supplied to the to-be-cleaned pipeline system (A), and is divided as cleaning medium stream (TS2') of two partial streams after leaving the to-be-cleaned pipeline system (A). One of the partial streams is used for cleaning the pipeline systems (B, B ') and the other partial stream is supplied again to the collecting tank. An independent claim is also included for a device for simultaneous cleaning of a set of pipelines or pipeline systems.

IPC 8 full level

B08B 9/032 (2006.01)

CPC (source: EP US)

B08B 9/0323 (2013.01 - EP US); **B08B 9/0325** (2013.01 - EP US)

Citation (opposition)

Opponent :

- DE 3809473 A1 19881013 - CIBA GEIGY AG [CH]
- DE 3628656 A1 19880225 - JANSEN HEIKO [DE]
- EP 0042591 A1 19811230 - FUJI ELECTRIC CO LTD [JP]
- WO 2005099918 A1 20051027 - LAUZON NORMAND [CA]
- DE 19741242 C1 19990708 - DIVERSEY LEVER GMBH [DE]
- DE 19643552 A1 19980430 - HENKEL ECOLAB GMBH & CO OHG [DE]
- DE 4127663 A1 19930225 - HENKEL KGAA [DE]
- US 5007444 A 19910416 - SUNDHOLM GOERAN [FI]
- US 5680877 A 19971028 - EDSTRAND CRAIG [US], et al

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DE102014109447A1; CN103706602A

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)

EP 1990104 A2 20081112; EP 1990104 A3 20100804; EP 1990104 B1 20111123; EP 1990104 B2 20151028; AT E534475 T1 20111215; CA 2630966 A1 20081111; CA 2630966 C 20130423; DE 102007022798 A1 20081113; ES 2377159 T3 20120323; ES 2377159 T5 20160222; PL 1990104 T3 20120430; PL 1990104 T5 20160531; US 2009000647 A1 20090101; US 8029625 B2 20111004

DOCDB simple family (application)

EP 08103936 A 20080513; AT 08103936 T 20080513; CA 2630966 A 20080508; DE 102007022798 A 20070511; ES 08103936 T 20080513; PL 08103936 T 20080513; US 11812008 A 20080509