

Title (en)
CHEMICAL REACTOR, REFRIGERATING MACHINE AND CONTAINER PROVIDED THEREWITH, AND REAGENT CARTRIDGE THEREFOR

Title (de)
CHEMISCHER REAKTOR, KÄLTEMASCHINE UND BEHÄLTER AUSGESTATTET MIT DIESEM REAKTOR UND REAGENZPATRONE DAFÜR

Title (fr)
REACTEUR CHIMIQUE, MACHINE FRIGORIFIQUE ET CONTENEUR AINSI EQUIPES, ET CARTOUCHE DE REACTIF S'Y RAPPORTANT

Publication
EP 0692086 A1 19960117 (FR)

Application
EP 94912588 A 19940405

Priority
• FR 9400377 W 19940405
• FR 9304141 A 19930407

Abstract (en)
[origin: US5661986A] PCT No. PCT/FR94/00377 Sec. 371 Date Oct. 5, 1995 Sec. 102(e) Date Oct. 6, 1995 PCT Filed Apr. 5, 1994 PCT Pub. No. WO94/23253 PCT Pub. Date Oct. 13, 1994A reagent (26) combines exothermically with a cold refrigerating fluid exiting a refrigerating evaporator during a refrigeration cycle, then releases the refrigerating fluid endothermically once it has been heated to a sufficiently high temperature by means of a heating element (17) during a regeneration cycle during which the released refrigerating fluid condenses in a pressurized tank. The reagent is confined inside stainless steel walls (29, 31, 34) which prevent it from swelling. These walls include perforated tubes (34) lining channels (32) in which the mass exchanges take place during the combining and separating reactions. The heating element (17) is fitted in a central cavity (46). An air flow (54), which is interrupted during regeneration, evacuates the heat of the combining reaction by means of fins (56). The invention prevents the block of reagent from distorting and becoming progressively inoperative over repeated cycles.

IPC 1-7
F25B 35/04

IPC 8 full level
F25B 17/08 (2006.01); **F25B 35/04** (2006.01)

CPC (source: EP US)
F25B 35/04 (2013.01 - EP US)

Cited by
EP1621828A1; FR2873793A1

Designated contracting state (EPC)
AT DE DK ES GB NL SE

DOCDB simple family (publication)
US 5661986 A 19970902; AT E167930 T1 19980715; AU 6506994 A 19941024; CA 2159901 A1 19941013; CA 2159901 C 20021001; DE 69411377 D1 19980806; DE 69411377 T2 19990128; EP 0692086 A1 19960117; EP 0692086 B1 19980701; ES 2120033 T3 19981016; FR 2703763 A1 19941014; FR 2703763 B1 19950623; JP H08508335 A 19960903; SG 52474 A1 19980928; WO 9423253 A1 19941013

DOCDB simple family (application)
US 53526895 A 19951006; AT 94912588 T 19940405; AU 6506994 A 19940405; CA 2159901 A 19940405; DE 69411377 T 19940405; EP 94912588 A 19940405; ES 94912588 T 19940405; FR 9304141 A 19930407; FR 9400377 W 19940405; JP 52176594 A 19940405; SG 1996005046 A 19940405