

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  
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Application  
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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.

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