

Title (en)

COLD-ACCUMULATING MATERIAL AND COLD-ACCUMULATING REFRIGERATOR

Title (de)

KÄLTESPEICHERNDES MATERIAL UND KÄLTESPEICHERNDER KÜHLSCHRANK

Title (fr)

MATERIAU ACCUMULATEUR DE FROID ET REFRIGERATEUR A ACCUMULATION DE FROID

Publication

**EP 0947785 A1 19991006 (EN)**

Application

**EP 98947963 A 19981020**

Priority

- JP 9804749 W 19981020
- JP 28720097 A 19971020

Abstract (en)

A cold accumulating material comprising magnetic substance expressed by the general formula:  $RCu_{1-x}M_{1+x}$  wherein R denotes at least one of rare earth element selected from the group consisting of Y, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Er, Ho, Tm and Yb, M denotes at least one element selected from the group consisting of Ag, Au, Al, Ga, In, Ge, Sn, Sb, Si, Bi, Ni, Pd, Pt, Zn, Co, Rh, Ir, Mn, Fe, Ru, Cr, Mo, W, V, Nb, Ta, Ti, Zr and Hf, and wherein Ni and Ge are not simultaneously selected, and x in atomic ratio satisfies a relation:  $-0.95 \leq x \leq 0.90$ . According to the above structure, there can be provided a cold accumulating material and a refrigerator using the cold accumulating material capable of exhibiting a remarkable and stable refrigerating performance at an extremely low temperature for a long time. <IMAGE>

IPC 1-7

**F25B 9/00**

IPC 8 full level

**F25B 9/14** (2006.01); **H01F 1/01** (2006.01)

CPC (source: EP)

**F25B 9/14** (2013.01); **H01F 1/0009** (2013.01); **H01F 1/015** (2013.01); **F25B 2309/003** (2013.01)

Cited by

EP1016701A3; EP1854859A4; EP3617288A4; US6363727B1; WO2007036729A1; WO2006092871A1; US8109100B2; US11370949B2

Designated contracting state (EPC)

DE

DOCDB simple family (publication)

**EP 0947785 A1 19991006**; **EP 0947785 A4 20000607**; **EP 0947785 B1 20030423**; CN 1174200 C 20041103; CN 1248319 A 20000322; DE 69813767 D1 20030528; DE 69813767 T2 20040212; WO 9920956 A1 19990429

DOCDB simple family (application)

**EP 98947963 A 19981020**; CN 98802670 A 19981020; DE 69813767 T 19981020; JP 9804749 W 19981020