

Title (en)

Production of very low-temperature refrigeration in a thermochemical device.

Title (de)

Erzeugung von Tiefkühlung in einer thermochemischen Vorrichtung.

Title (fr)

Production de froid à très basse température dans un dispositif thermochimique.

Publication

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Application

**EP 05814788 A 20051104**

Priority

- FR 2005002748 W 20051104
- FR 0411766 A 20041104

Abstract (en)

[origin: WO2006048558A1] The invention relates to a thermochemical device and method for producing very low-temperature refrigeration. The inventive device produces refrigeration whose temperature  $T_f < -20$  °C from a heat source available at a  $T_h$  temperature of 60-80 °C and a heat sink at an ambient temperature  $T_o$  of 10-25 °C. Said device comprises two coupled dipoles operating in an opposite-phase mode. Thermochemical phenomena in one dipole are such that said dipole can produce refrigeration at the  $T_f$  by means of a heat sink at the ambient temperature  $T_o$ . The thermochemical phenomena in the other dipole are selected such that said dipole is regeneratable from a heat source  $T_h$  and the heat sink at the temperature  $T_o$ .

IPC 8 full level

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