

Title (en)

A COOLING MATERIAL USING PARTICLES ARRANGED FOR GENERATION OF SURFACE PLASMON RESONANCES

Title (de)

KÜHLSTOFF MIT OBERFLÄCHENPLASMONRESONANZEN ERZEUGEND ANGEORDNETEN PARTIKELN

Title (fr)

MATÉRIAU REFROIDISSEUR COMPRENANT DES PARTICULES DISPOSÉES DE MANIÈRE À GÉNÉRER DES RÉSONANCES PLASMONIQUES DE SURFACE

Publication

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Application

**EP 08756974 A 20080619**

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Abstract (en)

[origin: WO2008154694A1] The present invention provides a cooling material which comprises particles that are arranged for generation of surface plasmon resonances. The surface plasmon resonances have a wavelength or wavelength range within an atmospheric window wavelength range in which the atmosphere of the earth has a greatly reduced average absorption and emission compared with the average absorption and emission in an adjacent wavelength range, whereby the cooling material is arranged for emission of thermal radiation associated with the generated surface plasmon resonances and absorption of radiation from the atmosphere is greatly reduced.

IPC 8 full level

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Citation (search report)

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- [X] M.S. ANDERSON: "Surface enhanced infrared absorption by coupling phonon and plasmon resonance", APPLIED PHYSICS LETTERS, vol. 87, no. 14, 2005, pages 144102-1 - 144102-3, XP002611704, DOI: 10.1063/1.2077838
- See references of WO 2008154694A1

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