

Title (en)

COMPOSITE HYBRID PANEL, OR BUILDING ELEMENT FOR COMBINED HEATING, COOLING, VENTILATING AND AIR-CONDITIONING

Title (de)

VERBUNDHYBRIDPLATTE ODER KONSTRUKTIONSELEMENT ZUR KOMBINIERTEN ERWÄRMUNG, KÜHLUNG, BELÜFTUNG UND KLIMAREGULIERUNG

Title (fr)

PAROI HYBRIDE COMPOSITE, PANNEAU DE PLAFOND OU DE PLANCHER OU ELEMENT DE CONSTRUCTION DESTINES A DES FONCTIONS DE CHAUFFAGE, REFROIDISSEMENT, VENTILATION, CLIMATISATION ET A D'AUTRES FONCTIONS INTERIEURES

Publication

EP 1800080 A1 20070627 (EN)

Application

EP 05817727 A 20050831

Priority

- TR 2005000039 W 20050831
- US 61812204 P 20041014

Abstract (en)

[origin: WO2006041418A1] An invention of composite, hybrid radiant/forced and natural convection, integrated, sandwiched, multi-role panel (1) optimally integrates heating, cooling, ventilating, air-conditioning, thermo-electric effect, energy recovery, and energy storage functions at very moderate operating temperatures such that it can directly utilize renewable and waste energy resources having very low exergy. The composite hybrid panel or building element (1) having a diffuser layer (2) that is thermally conductive, a porous layer (3) providing uniform air diffusion, a thermal insulation layer (4) simply attached or embedded or integrated to a building wall ceiling, floor or stands alone for indoor space partitioning purposes.

IPC 8 full level

F28F 13/12 (2006.01); **F24F 7/10** (2006.01)

CPC (source: EP US)

F24F 5/0089 (2013.01 - EP US); **F24F 5/0092** (2013.01 - EP US); **F24F 13/068** (2013.01 - EP US); **F24T 10/30** (2018.04 - EP US); **F28F 3/12** (2013.01 - EP US); **Y02E 10/10** (2013.01 - EP US)

Citation (search report)

See references of WO 2006041418A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2006041418 A1 20060420; EP 1800080 A1 20070627; US 2008086981 A1 20080417

DOCDB simple family (application)

TR 2005000039 W 20050831; EP 05817727 A 20050831; US 57729505 A 20050831