

Title (en)
ENERGY RECOVERY APPARATUS

Title (de)
APPARAT ZUR ENERGIERÜCKGEWINNUNG

Title (fr)
APPAREIL DE RECUPERATION D'ENERGIE

Publication
EP 1261779 A1 20021204 (EN)

Application
EP 01910253 A 20010221

Priority
• NO 0100067 W 20010221
• NO 20000899 A 20000223

Abstract (en)
[origin: WO0163061A1] Building structure comprising wall and/or roof element(s) (1) for retrieval of energy and for transmitting daylight into the building structure. The novel and inventive features of the invention are a double shell (2) in each wall and/or roof element (1), having a first layer (3) facing the exterior surroundings and being adapted for transmitting incident solar radiation into the building, and a second layer (4) separating the interior of the building structure from a climate zone (5) between the first and the second layer, a duct system (6) which preferably is adapted for natural ventilation and which is integrated with the building structure, a first liquid circulation system (7) which forms an integrated part of the building structure, adapted for exploiting solar energy, daylight transmitter(s) (8) arranged in each wall and/or roof element (1) for transmitting daylight into the interior of the building structure, a sun screening means (9) arranged on the exterior side of the double shell (2), exposed to the surrounding, and a control system (10) comprising sensors at least for incident solar radiation and adapted at least for controlling the sun screening means (9). An important aspect of the invention is that energy and light is utilised by means of co-operation between the double shell (2), the duct system (6), the first liquid circulation system (7), each of the daylight transmitters (8), the sun screening means (9) and the control system (10).

IPC 1-7
E04B 1/00; **E04D 13/18**; **F24J 2/00**

IPC 8 full level
E06B 9/28 (2006.01); **F21S 11/00** (2006.01); **F24F 5/00** (2006.01); **F24J 2/04** (2006.01); **F24J 2/40** (2006.01)

CPC (source: EP US)
E06B 9/28 (2013.01 - EP); **F21S 11/00** (2013.01 - EP); **F21V 33/0088** (2013.01 - EP US); **F24F 5/0075** (2013.01 - EP); **F24S 20/66** (2018.04 - EP US); **F24S 50/80** (2018.04 - EP); **E06B 2009/2417** (2013.01 - EP); **F24F 2005/0082** (2013.01 - EP); **F24F 2007/004** (2013.01 - EP US); **Y02A 30/00** (2017.12 - EP); **Y02A 30/272** (2017.12 - EP); **Y02B 10/20** (2013.01 - EP); **Y02B 30/90** (2013.01 - EP); **Y02E 10/40** (2013.01 - EP)

Citation (search report)
See references of WO 0163061A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 0163061 A1 20010830; AU 3782901 A 20010903; EP 1261779 A1 20021204; NO 20000899 A 20010409; NO 20000899 D0 20000223; NO 309880 B1 20010409

DOCDB simple family (application)
NO 0100067 W 20010221; AU 3782901 A 20010221; EP 01910253 A 20010221; NO 20000899 A 20000223