

Title (en)  
ENERGY RECOVERY APPARATUS

Title (de)  
APPARAT ZUR ENERGIERÜCKGEWINNUNG

Title (fr)  
APPAREIL DE RECUPERATION D'ENERGIE

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Application  
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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).

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