

Title (en)
OUTER BUILDING ELEMENT

Title (de)
GEBÄUDEAUßENELEMENT

Title (fr)
ÉLÉMENT EXTÉRIEUR DE BÂTIMENT

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Abstract (en)
[origin: WO2011101439A2] The invention relates to an outer building element (1) for receiving a solar element (2) for collecting and/or converting solar energy, comprising at least one frame (3) based on concrete. Said frame (3) is embodied as a single-component, autonomous moulded body (4) adapted by its outer shape to the physical location and by its inner shape (42) to the components to be received and a light-permeable covering (5). The moulded body (4) has at least one first groove (43) with an elastic seal (6) forming the seal between the light-permeable cover (5) and the frame (3). During the production of the outer building element (1) by casting with glass fibre-reinforced concrete, various components can be directly cast therewith, especially passages, lines for heat transfer fluid, fixations and the like. The outer building element according to the invention enables the application of an inner roof element, an outer roof element, a façade element or a mounting element on a flat roof. As a result of the materials used, said outer building element is weather-resistant for at least 50 years and economical to produce. The use of concrete instead of plastic or light metal reduces the fire load of a building provided with an outer building element according to the invention. By casting cables and the insulation thereof into the frame (3) and by using protected plug-in connections, burning of the insulation and therefore the entrance of fire-fighting water is prevented such that, in the event of a fire, the emission of health-hazardous gases is avoided and the risk of electrocution during the use of water for fire-extinguishing is reduced.

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Citation (search report)
See references of WO 2011101439A2

Citation (examination)
• DE 3418005 A1 19851121 - STANFORD RES INST INT [US]
• US 2009223550 A1 20090910 - CURTIN GERALD [US], et al
• US 5768831 A 19980623 - MELCHIOR BERND [DE]

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