

Title (en)

MULTILAYER STRUCTURE FOR TRANSPORTING OR STORING HYDROGEN

Title (de)

MEHRSCHICHTSTRUKTUR ZUM TRANSPORT ODER ZUR SPEICHERUNG VON WASSERSTOFF

Title (fr)

STRUCTURE MULTICOUCHE POUR LE TRANSPORT OU LE STOCKAGE DE L'HYDROGENE

Publication

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Application

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Abstract (en)

[origin: CA3163645A1] The invention relates to a multilayer structure for transporting, distributing and storing hydrogen, comprising, from the inside to the outside, a sealing layer (1) and at least one composite reinforcement layer (2), said innermost composite reinforcement layer being wound around said sealing layer (1), said sealing layer consisting of a composition predominantly comprising: a polyamide thermoplastic polymer PA11, up to less than 15% by weight of impact modifier, in particular up to 12% by weight of impact modifier relative to the total weight of the composition, up to 1.5% by weight of plasticizer relative to the total weight of the composition, said composition being devoid of nucleating agent and of polyether block amide (PEBA), and at least one of said composite reinforcement layers consisting of a fibrous material in the form of continuous fibers, which is impregnated with a composition predominantly comprising at least one polymer P2j, (j = 1 to m, m being the number of reinforcement layers), in particular an epoxy or epoxide-based resin, said structure being devoid of an outermost layer and, adjacent to the outermost layer, of a composite reinforcement layer of polyamide polymer.

IPC 8 full level

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