

Title (en)

Radiation shielding door elements comprising polyurethan foam

Title (de)

Strahlenschutztürelemente mit Polyurethanschäumen

Title (fr)

Éléments de porte de protection contre les rayonnements comprenant de la mousse de polyuréthane

Publication

EP 1621719 A1 20060201 (DE)

Application

EP 05015510 A 20050718

Priority

DE 102004036756 A 20040729

Abstract (en)

In door elements comprising a rigid polyurethane foam (I) between covering layers, (I) is obtained from aromatic polyisocyanates, a polyol component and a radiation-protecting additive (II) comprising (a) gadolinium, (b) barium, indium, tin, molybdenum, niobium, tantalum, zirconium or tungsten and optionally (c) bismuth or rare earth metals other than gadolinium. In door elements comprising a rigid polyurethane foam (I) between covering layers, where (I) is obtained by reacting aromatic polyisocyanates with a polyol component (having on average at least two isocyanate-reactive groups and containing polyether and/or polyester polyols), a radiation-protecting additive (II), blowing agents and optionally catalysts, auxiliaries and/or additives, (II) comprises (by weight) (a) at least 26% gadolinium, (b) 10-74% barium, indium, tin, molybdenum, niobium, tantalum, zirconium or tungsten and (c) 0-64% bismuth, lanthanum, cerium, praseodymium, neodymium, promethium, samarium, europium, terbium, dysprosium, holmium, erbium, thulium, ytterbium or lutetium. Independent claims are included for the preparation of the door elements.

IPC 8 full level

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CPC (source: EP US)

E06B 5/18 (2013.01 - EP US); **Y10T 428/249986** (2015.04 - EP US); **Y10T 428/249988** (2015.04 - EP US)

Citation (search report)

- [Y] DE 1139967 B 19621122 - COMPRIFALT IBS BAUSPEZIALITAET
- [Y] DE 10340124 A1 20040701 - BAYER AG [DE]

Cited by

ITBA20110009A1; CN108440737A; CN109401279A; CN110105743A; DE102011122745A1

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