

Title (en)

BONDING AGENT AND NANOPARTICLES WITH BARRIER PROPERTIES

Title (de)

BINDEMITTEL UND MIT BARRIERE-EIGENSCHAFTEN ENTHALTEND NANOPARTIKEL

Title (fr)

LIANTS A PROPRIETES BARRIERES CONTENANT DES NANOPARTICULES

Publication

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Application

EP 05761663 A 20050624

Priority

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Abstract (en)

[origin: WO2006015659A2] The invention relates to a bonding agent with barrier properties, comprising: A) at least one compound which is fluid in a range of 18 °C to 100 °C, preferably 20 °C to 80 °C, with at least one reactive functional group which may be hardened by radiation as component (A), B) at least one compound with at least one reactive functional group which may be hardened by radiation and with at least one COOH-group as component (B) and C) at least one nanoscale filler as component (C), preferably selected from the group of oxides, nitrides, halides, sulphides, carbides, tellurides, selenides of the second to fourth main group, transition elements, lanthanides and/or the group of polyorganosiloxanes. The bonding agent is used as a radiation-hardening bonding agent in coating agents, fillers, sealers or adhesives. The invention further relates to a method for the production of composite films with barrier properties against CO₂, O₂, N₂, water vapour and flavourings using said bonding agents and composite films made by said method.

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