

Title (en)
Compound for making fibre materials oil and/or water resistant

Title (de)
Zusammensetzung für die Öl- und/oder Wasserabweisende Ausrüstung von Fasermaterialien

Title (fr)
Composition pour l'équipement oléofuge et/ou hydrofuge de matériaux en fibres

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Application
EP 09012250 A 20090926

Priority
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Abstract (en)
Aqueous composition comprises at least components of A-C, where the component A is either a mixture which contains at least the components of A1-A3 in which the component A1 is paraffin wax; the component B is a mixture which contains at least the components B1-B3 in which the component B1 is an isocyanate group-containing polyurethane, the component B2 is a dispersant or its mixture and contains ethoxylated alcohols and optionally a divalent aliphatic alcohol and an inorganic acid, the component B3 is water; and the component C is a polymer that contains perfluoroalkyl (RF) groups. Aqueous composition comprises at least components of A-C, where component A is either a mixture which contains at least the components of A1-A3, in which the component A1 is paraffin wax, the component A2 is a condensation product of 12-22C alcohol, an etherified, preferably quaternized polymethylol-melamine and optionally a polyhydric ethanolamine, which 0.05-1.5 wt.% of an acid, preferably acetic acid is contained, and the component A3 is water or the component A is a mixture that contains at least the components A4-A6, and the component A4 is a polysiloxane, which in addition alkyl groups bonded to silicon atoms contain hydrogen atoms bonded to silicon atom, and an alkyl hydrogen polysiloxane, where the component A5 is water, and the component A6 is a dispersant, preferably an ethoxylated alcohol or a mixture of ethoxylated alcohols, where preferably ethoxylated linear or branched alcohols are used with 8-20 carbon atoms; the component B is a mixture which contains at least the components B1-B3, in which the component B1 is an isocyanate group-containing polyurethane, whose isocyanate groups are blocked, preferably with an aliphatic ketone oxime; the polyurethane is constructed preferably from an aromatic or aliphatic, preferably an aromatic diisocyanate; and the diisocyanate preferably with 2-6C diol is reacted to a trivalent aliphatic alcohol and an N-alkylated diethanolamine or triethanolamine; the component B2 is a dispersant or its mixture and contains ethoxylated alcohols and optionally a divalent aliphatic alcohol and optionally an inorganic acid; the component B3 is water; the component C is a polymer that contains perfluoroalkyl (RF) groups, where 55-100% of all the present RF-group containing 6 carbon atoms; and the composition contains optionally a zirconium salt, preferably zirconium acetate, as component D. An independent claim is included for treating textile flat structures made of fiber materials, comprising treating the flat structures with the composition and then drying.

Abstract (de)
Es werden wässrige Zusammensetzungen beschrieben, welche sich für die Behandlung von textilen Flächengebilden eignen, denen hierdurch öl- und/oder wasserabweisende Eigenschaften verliehen werden. Die Zusammensetzungen enthalten unter anderem Polymere, welche Perfluoralkylgruppen (R F -Gruppen) aufweisen, wobei 55 bis 100 % der R F -Gruppen 6 Kohlenstoffatome enthalten.

IPC 8 full level
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CPC (source: EP KR US)
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Citation (applicant)
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Citation (search report)
• [AD] EP 0872503 A1 19981021 - CIBA SC PFERSEE GMBH [DE]
• [A] EP 1225269 A1 20020724 - CIBA SC PFERSEE GMBH [DE]
• [A] US 5508370 A 19960416 - REIFF HELMUT [DE], et al
• [A] EP 0537578 A2 19930421 - BAYER AG [DE]

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CN103469586A; WO2013083110A1; WO2014184097A1

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