

Title (en)

PRIMER TO IMPROVE ADHESION OF ADHESIVE TAPES ON HYDROPHILIC SURFACES

Title (de)

PRIMER ZUR VERBESSERUNG DER ADHÄSION VON KLEBEBAENDERN AUF HYDROPHILEN OBERFLÄCHEN

Title (fr)

PRIMER POUR AMÉLIORER L'ADHÉRENCE DES BANDES ADHÉSIVES SUR DES SURFACES HYDROPHILES

Publication

**EP 3140344 A1 20170315 (DE)**

Application

**EP 15718199 A 20150420**

Priority

- DE 102014208814 A 20140509
- EP 2015058495 W 20150420

Abstract (en)

[origin: WO2015169575A1] The invention concerns a primer comprising a mixture G, in dispersion or solution in one or more solvents, of at least one copolymer obtained by copolymerizing a monomer mixture comprising at least 90 wt% of the following monomers: vinylcaprolactam and/or vinylpyrrolidone and one or more of monomers a) and/or b): a) acrylic esters of a linear, primary alcohol having 2 to 10 carbon atoms in the alkyl radical of the alcohol, b) acrylic esters of a branched non-cyclic alcohol having 3 to 12 carbon atoms in the alkyl radical of the alcohol, at least one organofunctional silane of the general structure (I):  $(R_1O)_xSi(R_2)_y(R_3)_z$ , in which the radicals R<sub>1</sub> independently of one another are a C<sub>1</sub>-C<sub>4</sub> alkyl radical, a C<sub>2</sub>-C<sub>6</sub> alkoxyalkyl radical or an acetyl radical; the radical R<sub>2</sub> is an aminoalkyl radical, a vinyl group, a methacryloyloxyalkyl radical, an isocyanatoalkyl radical, an O-methylcarbamatoalkyl radical, a glycidoxylalkyl radical or a phenyl radical; the radicals R<sub>3</sub> independently of one another are a C<sub>1</sub>-C<sub>18</sub> alkyl radical and x = 1, 2 or 3; y = 0 or 1 and z = 4 - x - y; at least one metal compound selected from the group consisting of metal acetylacetones, metal alkoxides and alkoxy-metal acetylacetones. A primer of this kind enables effective promotion of adhesion between pressure-sensitive adhesive tapes and hydrophilic surfaces like glass especially, and allows for incorporation of functional fillers.

IPC 8 full level

**C08K 5/057** (2006.01); **C08K 5/5415** (2006.01); **C08K 5/5435** (2006.01); **C09J 7/20** (2018.01); **C09J 139/04** (2006.01); **C09J 139/06** (2006.01)

CPC (source: CN EP KR US)

**C08K 5/057** (2013.01 - CN EP KR US); **C08K 5/5415** (2013.01 - CN EP KR US); **C08K 5/5419** (2013.01 - US);  
**C08K 5/5435** (2013.01 - CN EP KR US); **C09J 5/00** (2013.01 - KR US); **C09J 7/20** (2017.12 - EP US); **C09J 11/06** (2013.01 - CN KR);  
**C09J 133/08** (2013.01 - US); **C09J 139/04** (2013.01 - CN EP KR US); **C09J 139/06** (2013.01 - CN EP KR US); **C09J 2433/003** (2013.01 - US)

Citation (search report)

See references of WO 2015169575A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**DE 102014208814 A1 20151112**; CN 106459714 A 20170222; CN 106459714 B 20190809; EP 3140344 A1 20170315;  
JP 2017519093 A 20170713; KR 20170007358 A 20170118; US 2017066947 A1 20170309; WO 2015169575 A1 20151112

DOCDB simple family (application)

**DE 102014208814 A 20140509**; CN 201580024366 A 20150420; EP 15718199 A 20150420; EP 2015058495 W 20150420;  
JP 2017510741 A 20150420; KR 20167034314 A 20150420; US 201515308136 A 20150420