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(54) Title: FLUOROPOLYMER COMPOSITIONS AND TREATED SUBSTRATES

(57) Abstract: A composition comprising a polymer prepared by: reacting (a) at least one diisocyanate, polyisocyanate, or mixture thereof, having isocyanate groups, and (b) at least one fluorinated compound selected from the formula (I): Rf^1-L-X wherein Rf^1 is a monovalent, partially or fully fluorinated, linear or branched, alkyl radical having 2 to 100 carbon atoms; optionally interrupted by 1 to 50 oxygen atoms; wherein the ratio of carbon atoms to oxygen atoms is at least 2:1 and no oxygen atoms are bonded to each other; L is a bond or a linear or branched divalent linking group having 1 to 20 carbon atoms, said linking group optionally interrupted by 1 to 4 hetero-radicals selected from the group consisting of -O-, -NR-, -S-, -SO-, -SO₂-, -N(R)C(O)- wherein R is H or C₁-C₆ alkyl, and said linking group optionally substituted with CH₂Cl; X is an isocyanate-reactive group selected from the group consisting of OH, -N(R)H, and SH wherein R is H or C₁-C₆ alkyl; and thereafter reacting with (c) water and (d) an isocyanate-reactive non-fluorinated particulate component.



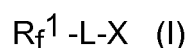
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TITLE

FLUOROPOLYMER COMPOSITIONS AND TREATED SUBSTRATES

ABSTRACT

A composition comprising a polymer prepared by: reacting (a) at
5 least one diisocyanate, polyisocyanate, or mixture thereof, having
isocyanate groups, and (b) at least one fluorinated compound selected
from the formula (I):



wherein

10 R_f^1 is a monovalent, partially or fully fluorinated, linear or branched,
alkyl radical having 2 to 100 carbon atoms; optionally interrupted by 1 to
50 oxygen atoms; wherein the ratio of carbon atoms to oxygen atoms is at
least 2:1 and no oxygen atoms are bonded to each other;

L is a bond or a linear or branched divalent linking group having 1
15 to 20 carbon atoms, said linking group optionally interrupted by 1 to 4
hetero-radicals selected from the group consisting of -O-, -NR-, -S-, -SO-,
-SO₂-, -N(R)C(O)- wherein R is H or C₁ – C₆ alkyl, and said linking group
optionally substituted with CH₂Cl;

X is an isocyanate-reactive group selected from the group
20 consisting of -OH, -N(R)H, and -SH wherein R is H or C₁ – C₆ alkyl;

and thereafter reacting with (c) water and (d) an isocyanate-reactive
non-fluorinated particulate component.

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