

Title (en)
COMPOSITIONS AND TREATED SUBSTRATES HAVING REVERSIBLY ADAPTABLE SURFACE ENERGY PROPERTIES AND METHOD FOR MAKING THE SAME

Title (de)
ZUSAMMENSETZUNGEN UND BEHANDELTE SUBSTRATE MIT REVERSIBEL ADAPTIERBAREN OBERFLÄCHENERGIEEIGENSCHAFTEN UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)
COMPOSITIONS ET SUBSTRATS TRAITES A PROPRIETES D'ENERGIE DE SURFACE REVERSIBLES ADAPTABLES ET PROCEDE DE PREPARATION CORRESPONDANT

Publication
EP 1583786 A1 20051012 (EN)

Application
EP 03815185 A 20030827

Priority

- US 0326720 W 20030827
- US 34030003 A 20030110
- US 33984003 A 20030110
- US 33997103 A 20030110
- US 33991103 A 20030110

Abstract (en)
[origin: WO2004063241A1] The present invention relates generally to substrates that exhibit useful, auto adaptable surface energy properties that depend on the environment of the substrate. Such surface energy properties provide relatively high advancing and receding contact angles for liquids when in contact with the target substrate surface. The substrates exhibit low surface energy quantities of at most about 20 millijoules per square meter (mJ/m²) at a temperature of about 25 degrees C and a surface energy greater than about 20 mJ/m² at, or with exposure to, a temperature of about 40 degrees C. More specifically, encompassed within the present invention are textile substrates having this highly desirable unique surface energy modification property and which exhibit wash durable oil and water repellency and stain release features. Novel compositions and formulations that impart such surface energy modifications to substrates are also encompassed within this invention, as well as methods for producing such treated substrates.

IPC 1-7
C08G 8/30; B05D 3/02

IPC 8 full level
D06M 13/11 (2006.01); **B05D 3/02** (2006.01); **C08G 8/30** (2006.01); **D06M 13/395** (2006.01); **D06M 15/277** (2006.01); **D06M 15/564** (2006.01); **D06M 15/576** (2006.01)

CPC (source: EP KR)
B05D 3/02 (2013.01 - KR); **C08G 8/30** (2013.01 - KR); **D06M 13/11** (2013.01 - EP); **D06M 13/395** (2013.01 - EP KR); **D06M 15/277** (2013.01 - EP KR); **D06M 15/564** (2013.01 - EP); **D06M 15/576** (2013.01 - EP KR)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2004063241 A1 20040729; AU 2003265698 A1 20040810; BR 0317417 A 20051108; CA 2512027 A1 20040729; CA 2512027 C 20100518; EP 1583786 A1 20051012; EP 1583786 A4 20100825; JP 2006513332 A 20060420; JP 4298662 B2 20090722; KR 101004245 B1 20101224; KR 20050091779 A 20050915; MX PA05007414 A 20050912

DOCDB simple family (application)
US 0326720 W 20030827; AU 2003265698 A 20030827; BR 0317417 A 20030827; CA 2512027 A 20030827; EP 03815185 A 20030827; JP 2004566435 A 20030827; KR 20057012895 A 20030827; MX PA05007414 A 20030827