

Title (en)  
USE OF FORMALDEHYDE-FREE AQUEOUS BINDERS FOR SUBSTRATES

Title (de)  
VERWENDUNG FORMALDEHYDFREIER W[SSRIGER BINDEMITELE FÜR SUBSTRATE

Title (fr)  
UTILISATION DE LIANTS AQUEUX SANS FORMALDEHYDE SUR DES SUBSTRATS

Publication  
**EP 1828298 A2 20070905 (DE)**

Application  
**EP 05819208 A 20051214**

Priority  
• EP 2005013404 W 20051214  
• DE 102004061144 A 20041216

Abstract (en)  
[origin: WO2006063802A2] The invention relates to the use of formaldehyde-free aqueous binders with broad molecular weight distribution for substrates, comprising (A) 0 to 100 wt. % of an ethylenically-unsaturated acid anhydride, or an ethylenically-unsaturated carboxylic acid the carboxylic acid group of which can form an anhydride or mixtures thereof, (B) 100 to 0 wt. % of an ethylenically-unsaturated compound, (C) at least one polyfunctional curing agent or mixtures thereof and (D) 1 - 80 wt. % of an aqueous polymer dispersion, whereby the polymers from A) and B), obtained by radical polymerisation, on classification in a coordinate system of mean molecular weights Mw and polydispersity values, lie on the surface above a straight line, defined by the linear equation  $y = 1,25x + 20,000$  and displaced in the y-direction by at least + 3,000, whereby the x-axis is the weight average molecular weight and the y axis is the polydispersity value multiplied by 10,000. The invention further relates to the binder itself and the use thereof for example, for moulded bodies, mats or sheets, in particular, for fibrous and particulate substrates such as fibre fleece, glass fibres, rockwool, reprocessed cotton, natural fibres or artificial fibres.

IPC 8 full level  
**C08F 8/30** (2006.01); **C08J 5/04** (2006.01); **C08K 5/17** (2006.01); **C08L 35/00** (2006.01)

CPC (source: EP US)  
**C03C 25/285** (2013.01 - EP US); **C03C 25/34** (2013.01 - EP US); **C08F 8/30** (2013.01 - EP US); **C08K 5/17** (2013.01 - EP US); **C08L 35/00** (2013.01 - EP US); **D04H 1/4209** (2013.01 - EP US); **D04H 1/4218** (2013.01 - EP US); **D04H 1/587** (2013.01 - EP US); **D04H 1/64** (2013.01 - EP US); **D04H 1/645** (2013.01 - EP US); **D06M 15/263** (2013.01 - EP US); **D06M 15/267** (2013.01 - EP US); **C08L 25/14** (2013.01 - EP US); **Y10T 428/2933** (2015.01 - EP US); **Y10T 428/2998** (2015.01 - EP US); **Y10T 428/31645** (2015.04 - EP US); **Y10T 428/31649** (2015.04 - EP US); **Y10T 428/3167** (2015.04 - EP US); **Y10T 428/31906** (2015.04 - EP US)

Citation (search report)  
See references of WO 2006063802A2

Cited by  
US8979957B2

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

Designated extension state (EPC)  
AL BA HR MK YU

DOCDB simple family (publication)  
**DE 102004061144 A1 20060622**; EP 1828298 A2 20070905; US 2009252962 A1 20091008; WO 2006063802 A2 20060622; WO 2006063802 A3 20070308

DOCDB simple family (application)  
**DE 102004061144 A 20041216**; EP 05819208 A 20051214; EP 2005013404 W 20051214; US 72192205 A 20051214