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(54) Title: WATER-BASED COATING

(57) Abstract: A water-based coating is described comprising colloidal silica and lamellar materials such as glas flakes or mica admixed with a water-based film-forming polymeric carrier such as an epoxy. The water-based epoxy coating can be directly applied to unset, set, cured or uncured concrete and exhibits a water vapor permeance of about 0.14 perms by ASTM F-1869-04. A method for using the coating is also disclosed.

INTERNATIONAL SEARCH REPORT

International application No. PCT/US 06/03055

A. CLASSIFICATION OF SUBJECT MATTER IPC(8): C08K 3/34 (2007.01) USPC: 524/444			
According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED			
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) WEST (PGPB,USPT,EPAB,JPAB): colloidal silica, glass flakes, mica, epoxy, silane, silicate, pigment, curing, tetrahydrofurfuryl alcohol, propylene glycol monomethyl ether, water vapor permeance Google Scholar: colloidal silica, glass flakes, mica; esp@cenet: Ralph Sacks			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where a	ppropriate, of the relevant passages	Relevant to claim No.
X Y	US 5,439,957 A (TAKIMOTO et al.) 8 August 1995 (08 in 34-42; col 5, in 20-38; col 5, in 37-56; col 5, in 65-68		1-8 20 and 21
×	US 2003/0021917 A1 (HOTAKA et al.) 30 January 2003 (30.01.2003), para [0158], [0162], [0163], [0171], [0173], [0176], [0203], [0224], [0237], [0238], [0252], [0255], [0256], [0260],		9-10
Y	[0264], [0268], [0271], [0272], [0434].		11-14, 17, 18, 19
Y	US 2004/0112175 A1 (ISHIHARA et al.) 17 June 2004 (17.06.2004), para [0048], [0082], [0120]		11-14, 17, 18, 19
X Y	US 2004/0059036 A1 (GAVESKE) 25 March 2004 (25.03.2004), abstract; para [0019], [0026], [0045], [0059], [0084].		15-16 17-21
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