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[Continued on next page]

(54) Title: TITANIUM DIOXIDE PIGMENT GRIND DISPERSION AND PAINT

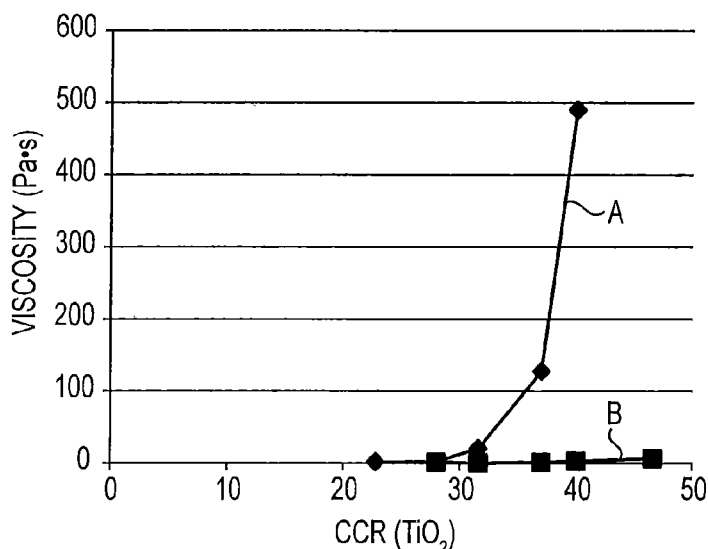


Fig. 1

(57) Abstract: A pigment grind dispersion of titanium dioxide pigment-polymer composite particles is made by mixing titanium dioxide particles with an aqueous emulsion containing (i) less than a saturation level amount of water-insoluble film-forming first polymer particles that adsorb to the titanium dioxide particles, and (ii) an inhibiting or interfering amount of water-insoluble film-forming second polymer particles that do not adsorb to the titanium dioxide particles, wherein the pigment grind dispersion has a titanium dioxide pigment volume concentration of about 25 to about 50 and a titania composite ratio of about 32 to about 60. The resulting titanium dioxide pigment-polymer composite particles can provide improved coating composition opacity compared to a coating composition that does not contain such composite particles, can employ reduced titanium dioxide amounts and less than a saturation level of the first polymer, and can provide improved storage stability.

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B. FIELDS SEARCHED
 Minimum documentation searched (classification system followed by classification symbols)
 C09C

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)
 EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 496 091 A1 (ROHM & HAAS [US]) 12 January 2005 (2005-01-12) claims 1-8 paragraphs [0008], [0111] - [0142] -----	1-15
X	EP 0 549 163 A1 (ICI PLC [GB]) 30 June 1993 (1993-06-30) claims 1-23 page 8, line 52 - page 16, line 58 -----	1-15
A	US 7 081 488 B2 (BARDMAN JAMES KEITH [US] ET AL) 25 July 2006 (2006-07-25) claim 1 -----	1-15
A	EP 2 161 304 A1 (ROHM & HAAS [US]) 10 March 2010 (2010-03-10) claims 1-9 -----	1-15

Further documents are listed in the continuation of Box C.

See patent family annex.

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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