



New connection on: : 21-09-2017 : 03:57:35 - Last disconnection on: : 20-09-2017 : 21:45:30

V 4.0.0.43847(LP,U,linux) (Rev:41675 2016-01-15 13:33:59 +0100#(D201710)) (RPM D201710)

Welcome to EPOQUE Rebuild under the Production Environment

[EPODOC: SS 22] NOx and degrading and titanium and dioxide and concrete and silica

Results in EPODOC 0

[SS 23] titanium and dioxide and concrete and silica

Results in EPODOC 64

[SS 24] NOx and titanium and dioxide and concrete and silica

Results in EPODOC 1

[SS 25] titanium and dioxide and concrete and silica and block

Results in EPODOC 5

[SS 26] ..li 1-5



1/5 © EPODOC / EPO

PN - [KR101378895B](#) B1 20140401

PR - KR20130004087 20130114

AP - KR20130004087 20130114

DT - I

CT - || STSE (B1)

[KR20040015159](#) A 20040218 [];

[KR101015061B](#) B1 20110216 [] (CHUN MA CONCRETE IND CO LTD [KR], et al);

[KR20100129994](#) A 20101210 [] (KIM SON KWON [KR]);

[WO2012038810](#) A1 20120329 [] (TECHNOKOLLA SOCIETA PER AZIONI [IT], et al)

PA - LEE JUN MYUNG [KR]; ECOTECH CO LTD [KR]

TI - COLOR **concrete** COMPOSITION AND COLOR **concrete** STRUCTURE USING THEREOF

AB - The present invention relates to a color **concrete** composition and a method for manufacturing a color **concrete** structure using the same, and more specifically, to a novel color **concrete** composition using a pigment having high dispersibility, and a method for manufacturing a high strength color **concrete** structure using the same. In

the **concrete** composition including cement, water and aggregate, the present invention provides the color **concrete** composition, with respect to 100 parts by weight of cement, comprising: 0.5-20 parts by weight of **titanium dioxide**; and 0.5-5 parts by weight of a color former comprising water-dispersible colloid **silica**, a color pigment, a silane bonding agent, and an ionic **block** copolymer micelle. Provided was the method for enabling the manufacturing of various color **concrete** according to the present invention. The manufacturing method according to the present invention has excellent color expression properties to express various colors while using a small amount of **titanium dioxide**, and thereby having a decreased strength reduction for grey **concrete** and being advantageous in coloring.

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- PN - [KR101296111B](#) B1 20130819
- PR - KR20130004141 20130114
- AP - KR20130004141 20130114
- DT - I
- CT - || STSE (B1)
[KR100826297B](#) B1 20080429 [] (MURYANG TECHNOLOGY CO LTD [KR], et al);
[KR20110116326](#) A 20111026 [] (HWANG SUK JOO [KR]);
[KR20010078963](#) A 20010822 [] (ANN JI HUN [KR], et al);
[KR101236434B](#) B1 20130222 [] (ECOTECH CO LTD [KR])
- PA - ECOTECH CO LTD [KR]
- TI - OCHER CLAY **CONCRETE** COMPOSITION AND OCHER CLAY CONCRERE STRUCTURE USING THEREOF
- AB - PURPOSE: A soil **concrete** composition with excellent yellow ocher color formation is provided to express various colors and has high strength by using small amount of **titanium dioxide**. CONSTITUTION: A yellow ocher soil **concrete** composition **titanium** comprise: 5-40 weight% of silane coupling agent selected from a group consisting of 0.5-20 parts by weight of **titanium dioxide**, 30-80 weight% of water-dispersible colloidal **silica**, 5-30 weight% of red clay pigment, 3- aminopropyltriethoxysilane, 3- mercaptopropyltrimethoxysilane, γ glycidloxypropyltrimethoxysilane based on 100 parts by weight of cement; 0.5-5 parts by weight of color former consisting of 5-30 weight% of ion **block** copolymer sulfonating polystyrene-b-poly methyl butylen **block** copolymer; and 0.5-2 parts by weight of fumed **silica**. The ion **block** copolymer has the sulfonation degree of styrene **block** of 50%. The pigment is one of azo, phthalocyan, and condensation polycyclic organic pigments.

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- PN - [GB1455251](#) A 19761110
- PR - GB19720039749 19720825
- AP - GB19720039749 19720825
- DT - *
- CCI - [C09J123/22](#) ; [C09J123/20](#)
- CLC - [C08L23/22](#) , [C08L101/00](#) , [C08K3/0033](#) , INV
[C09J123/20](#) , [C08L2666/04](#) , INV

- [C09J123/22](#), [C08L2666/02](#), [C08L2666/54](#), INV

- [C09J123/22](#), [C08L2666/04](#), INV

PA - EVODE LTD

TI - METHOD OF SEALING GAPS AND COMPOSITIONS THEREFOR HEAT

AB - 1455251 Hot-melt sealant compositions EVODE Ltd 20 Nov 1973 [25 Aug 1972]
 39749/72 Heading C3P Hot-melt sealant compositions which are solid and substantially non-tacky at room temperature comprise (1) a thermoplastic base polymer, (2) a plasticizer and (3) a filler, the thermoplastic base polymer comprising a cross-linked butyl rubber. The compositions are preferably solvent-free and suitable for application at 80 to 150 C., The base polymers may be acrylic polymers, polyvinyl butyrals, butyl polymers, polyamides, atactic polypropylene, copolymers of ethylene with acrylic acid, ethyl acrylate and vinyl acetate, or **block** copolymers of styrene with butadiene and isoprene. The plasticizers may be phthalate or sebacate esters, or hydrogenated abietyl alcohol. The filler may be particulate, e.g. ground limestone, whiting, clay, chalk, coated calcium carbonate, **silica**, **titanium dioxide** or barytes; lamellar, e.g. talc, mica and vermiculite; or fibrous, e.g. asbestos and glass. The compositions may also comprise tackifying resins, e.g. rosins, rosin esters, hydrogenated rosin esters and hydrocarbon resins, fire retardants, e.g. halogenated aromatic compounds, antimony trioxide and phosphorus- and nitrogencontaining fire retardants, optionally together with intumescent materials; moisture scavengers, e.g. quicklime; pigments and stabilizers. The compositions may be applied with caulking knives, portable heated extruders or injection guns to gaps in building structures, e.g. between **concrete** blocks or slabs, as double-glazing perimeter sealants and for sealing gaps in metal pressings, e.g. in motor vehicles or refrigerators. An example describes a sealant comprising chalk, coated calcium carbonate and quicklime together with E/VA copolymer, partially crosslinked butyl rubber, polybutene, hydrocarbon resin, dioctyl sebacate and **titanium dioxide**.

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PN - [GB1284942](#) A 19720809

PR - US19680750457 19680806

AP - GB19690038749 19690801

DT - **

CCI - [C04B28/24](#) ; [C04B28/26](#)

CLC - [C04B28/24](#), [C04B14/04](#), [C04B14/30](#), [C04B14/34](#), [C04B14/36](#), [C04B20/1055](#), [C04B22/00](#), [C04B24/26](#), [C04B24/42](#), [C04B40/06](#), INV

- [C04B28/26](#), [C04B14/20](#), [C04B14/30](#), [C04B14/34](#), [C04B20/1055](#), [C04B22/00](#), [C04B24/26](#), [C04B24/42](#), [C04B40/06](#), INV

- [C04B28/24](#), [C04B14/02](#), [C04B14/04](#), [C04B14/10](#), [C04B14/20](#), [C04B14/30](#), [C04B14/34](#), [C04B20/1003](#), [C04B24/26](#), [C04B24/42](#), INV

CCA - [C04B2111/00482](#)

PA - SCHNEIDER ROBERT H [US]; SCHUTT JOHN B [US]

TI - SILICATE COATING COMPOSITIONS

AB - 1284942 Proofing permeable materials R H SCHNEIDER and J B SCHUTT 1 Aug 1969 [6 Aug 1968] 38749/69 Heading D1P [Also in Division C4] In Example 3 a silicate coating composition obtained by mixing a first solution containing aqueous potassium silicate,

phenyl trimethoxy silane, wollastonite, **titanium dioxide**, talc and mica with a second colloidal **silica** sol containing wollastonite, hydrophobic **silica**, **titanium dioxide**, and mica is applied (a) to a **concrete block** (b) to a **block** and a sheet of polyurethane foam, to confer fire-proofing properties, (c) to wood, to confer water and chemical resistance thereto and (c) to a pressed cane fibre ceiling tile. In Example 5 a composition obtained by mixing aqueous potassium silicate containing **titanium dioxide**, phenyl trimethoxy silane, mica, hydrophobic **silica**, and wollastonite, with a colloidal **silica** sol, is applied (a) to a **concrete block** and (b) to polyurethane foam.

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PN - [GB1082976](#) A 19670913

PR - US19630293582 19630705

AP - GB19640026808 19640629

DT - **

CCI - [C08F20/58](#) ; [C08F8/00](#) ; [D06M14/00](#) ;
[D06M15/3562](#) ; [D21H17/39](#)

CLC - [C08F8/00](#), [C08F20/52](#), INV

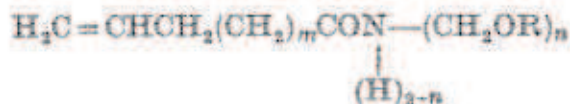
CCA - [Y10T428/31938](#) ; [Y10T442/2361](#)

IDT - 124BG12B2F5B1

PA - ROHM & HAAS

TI - Unsaturated amides and polymers thereof

AB - Monomers of the formula <FORM: 1082976/C3/1> wherein R is hydrogen or C1- 18 alkyl, m is 0, 1 or 2 and n is 1 or 2, are polymerized in bulk, solution, emulsion or suspension, or on fibres, filaments, woven or knitted fabrics or carded webs, alone or with one or more other copolymerizable monomers in the presence of polymerization catalysts. Alternatively, monomers of the formula $H_2C = CHCH_2(CH_2)_mCONH_2$ may be so polymerized and subsequently methylolated or alkoxymethylated. The monomers may be applied to starch, cellulose, e.g. cotton, incompletely etherified or esterified cellulose, e.g. rayon, polyamide nylons, wool, silk or casein, and subjected to conditions such that the monomers react with free hydroxy groups and are simultaneously or subsequently polymerized, or such that the monomers are polymerized and subsequently reacted with free hydroxy groups. The polymerization catalysts



may be ammonium persulphate or tertiary-butyl hydroperoxide, and may be incorporated during or after impregnation with the monomer. Other peroxy and azo catalysts are also specified. Effects so-produced are stiffening, crease - proofing, shrink - proofing, water-resistance or - repellency and lubricity. The polymers may also be obtained in the form of granules. They may be used as coating, impregnating or moulding resins; in admixture with starch, gelatine or plasticizers for coatings, films, thickening materials and warp sizes; in admixture with vinyl and acrylic resins and optional dyes and pigments to provide coatings on textiles, leather, paper, wood, metal or glass; as lacquers and enamels e.g. as solutions in xylene or butoxyethyl acetate; and as ingredients of water-based paints. The polymers may also be modified by reaction with polyisocyanates, polyepoxides, urea-formaldehyde, N, N1-ethyleneurea-formaldehyde or amino-triazine-formaldehyde condensates. In examples the monomers are homopolymerized or emulsion copolymerized with one or more of methyl, ethyl, butyl or 2-ethylhexyl acrylate, methacrylic acid, methylmethacrylate, vinylidene chloride, vinyl toluene, styrene, acrylamide and acrylonitrile, in the presence of ammonium persulphate, sodium hydrosulphite, an ethylene oxide condensate of tertiary-octylphenol and bromotrichloromethane. Mercaptans, e. g. mercapto-ethanol, may also be used. In another example an aqueous solution of N-methylol-4-pentenamide and the hydrochloride of 2-amino-2-methyl-propanol-1 is applied to cotton print-cloth, cured, washed with hot dilute sodium nitrite solution, padded with ammonium persulphate solution and further cured to impart crease-

resistance. The aqueous dispersions of polymers obtained in the examples may be further admixed with water-soluble cellulose ethers, polyvinyl alcohol, partially saponified polyvinyl acetate, copolymers of acrylic or methacrylic acid with methyl or ethyl acrylate, sodium acetate, sodium carbonate, chalk, morpholine, N-methyl-morpholine, triethylamine, ammonia, **titanium dioxide**, zinc oxide, zinc sulphide, barium sulphate, lithopone, mica, **silica**, iron oxides, chrome yellows, carbon black, powdered or flaked aluminium, bronze, brass, chromium and gold, sodium alginate, blue copper phthalocyanine pigment, diethylene glycol, tertiary-octylphenoxypolyethoxyethanol and the ammonium salt of a diisobutylene/maleic anhydride copolymer, to provide paints, adhesives and coating compositions. ALSO: Novel monomers of the formula <FORM:1082976/C2/1> wherein R is hydrogen or C1- 18 alkyl, m is 0, 1 or 2 and n is 1 or 2, are prepared by methylolating or alkoxymethylolating the corresponding amides of the above formula in which n is 0 or by etherifying methylolamides of the above formula in which R represents hydrogen. ALSO: Aqueous dispersions of copolymers of monomers of the formula: <FORM:1082976/D1-D2/1> wherein R is hydrogen or C1-18 alkyl, m is 0, 1 or 2 and n is 1 or 2, with other polymerisable monomers such as ethyl, butyl or 2-ethylhexyl acrylate or vinylidene chloride, are added to paper pulp and cast into sheets; mixed with blue copper phthalocyanine pigment, sodium alginate and aqueous tertiary-octylphenoxypoly-ethoxyethanol and applied to cotton percale; applied to non-woven fabrics such as rugs to impart bodying and to prevent ravelling; padded onto carded webs of viscose rayon fibres, air dried and

cured at 300 DEG F. to impart flexibility and soft hand; applied by means of spraying, brushing, roller-coating, dipping or knife-coating to fibres, filaments, and woven or knitted fabrics of polyamide nylon, wool, silk, cotton, rayon or other cellulose derivatives, and dried and cured in presence of a curing catalyst (a list of which is specified) to impart stiffness, shrink- or crease-proofing properties, water-resistance or -repellency, or lubricity; or similarly applied to leather, wood panels, chipboard, kraft bag paper, wall paper, asbestos cement shingles and siding sheets, stone, cement, **concrete**, bricks and cinder **block** to impart water-resistance and -repellency. ALSO: Homopolymers or copolymers of monomers of the formula: $\text{--}[\text{CH}_2\text{--}\text{CH}(\text{R})\text{--}]_m\text{--}[\text{CH}_2\text{--}\text{CH}(\text{R})\text{--}]_n\text{--}$ wherein R is hydrogen or C1-18 alkyl, m is 0, 1 or 2 and n is 1 or 2, are applied alone (e.g. as hot-melt coatings) or in admixture with water, xylene or butoxyethyl acetate solvents, vinyl and acrylic resins, an ammonium salt of a diisobutylene/maleic anhydride copolymer, **titanium dioxide**, zinc sulphide and barium sulphate, as paints, coatings or lacquers to leather, wood panels, chipboard, kraft bag paper, wall paper, asbestos cement shingles and siding sheets, glass, ceramics, stone, cement, **concrete**, bricks, cinder **block**, textiles, bare and primed cold rolled steel, aluminium and brass, or the bibulous fibrous backing of masking tape, or for backing pile fabrics used in upholstery. Application may be accomplished by spraying, brushing, roller-coating, dipping or knife-coating, and may be followed by curing by ageing or heating to 200 to 750 DEG F., e.g. with infra-red lamps, in the presence or absence of curing catalysts, lists of which are specified.

[SS 26]