

PatBase - Search results 07 June 2015

Search query (7): [SP]: 1. a water-reducing admixture for concrete, comprising a first composition comprising at least one calcium lignosulfonate and a second composition comprising at least one vinyl-copolymer, and at least one sugar. 2. the water-reducing admixture according to claim 1, whereby the first composition additionally comprises at least one amine, in particular triethanolamine 3. the water-reducing admixture according to claim 1, whereby the at least one vinyl-copolymer in the second composition comprises a substantially water soluble linear copolymer of monomeric units selected from vinyl acetate and vinyl alcohol with monomeric units of n-substituted maleamic acid in a molar ratio of 1:1, said copolymer represented by formula (a) [ftimg=59675801] wherein r1 is hydrogen, r2 is an unsubstituted c1 to c4-alkyl residue, a c1 to c10-alkyl residue which comprises an alkali metal carboxylate or alkaline earth metal carboxylate group, or a hydroxyl or amino group, an aromatic residue which comprises carboxylic acid or sulfonic acid groups or alkali metal carboxylate or sulfonate or alkaline earth metal carboxylate or sulfonate groups, or may together with the nitrogen atom to which they bond, form a morpholine ring x represents a hydrogen atom or the group -coch3 and m represents a hydrogen atom, a monovalent or divalent metal ion, or a substituted or unsubstituted ammonium group. 4. the water-reducing admixture according to claim 1, whereby the at least one vinyl-copolymer in the second composition comprises a compound represented by the formula [ftimg=59675802]5. the water-reducing admixture according to claim 1, whereby the first composition additionally comprises at least one sugar, in particular corn-syrup and/or glucose, at least one alkaline compound, in particular sodium hydroxide, at least one preservative, and at least one defoamer. 6. the water-reducing admixture according to claim 1, comprising a first composition comprising about 50 to 100 wt.- percent of at least one calcium-ligno-sulfonate, about 0 to 5 wt.- percent of at least one amine, in particular triethanolamine, about 0 to 10 wt.- percent of at least one sugar, in particular corn-syrup and/or glucose, about 0 to 3 wt.- percent of at least one alkaline compound, in particular sodium hydroxide about 0 to 3 wt.- percent of at least one preservative, and about 0 to 3 wt.- percent of at least one defoamer and, a second composition comprising about 10 to 90 weight percent of at least one vinyl-copolymer, and about 10 to 90 wt.- percent of at least one sugar, in particular glucose. 7. a method for reducing the water consumption in the preparation of a concrete, comprising the admixture according to claim 1. 8. the method according to claim 7, whereby the concrete is a concrete with a cement content ?250 kg/m3 and a content of fines including swelling clays passing 200 mesh (corresponding to 74 microns) ?2 percent, based on the weight of the total concrete. 9. a method for preparing a concrete comprising the steps: admixing a concrete mix with a first aqueous composition comprising water and at least one calcium lignosulfonate and admixing the mix obtained with a second aqueous composition comprising water, at least one vinyl-copolymer, and at least one sugar. 10. the method according to claim 9, whereby the first aqueous composition comprises 60 to 99 wt.- percent, in particular about 80 to 95 wt.- percent, of the total amount of water used for preparing the concrete, and the second aqueous composition comprises about 1 to 40 wt.- percent, in particular about 5 to 20 wt.- percent, of the total amount of water used for preparing the concrete. 11. the method according to claim 9, whereby the first aqueous composition additionally comprises an amine, in particular triethanolamine. 12. the method according to claim 9, whereby the at least one vinyl-copolymer in the second aqueous composition comprises a substantially water soluble linear copolymer of monomeric units selected from vinyl acetate and vinyl alcohol with monomeric units of n-substituted maleamic acid in a molar ratio of 1:1, said copolymer represented by formula (a) [ftimg=59675803] wherein r1 is hydrogen, r2 is an unsubstituted c1 to c4-alkyl residue, a c1 to c10-alkyl residue which comprises an alkali metal carboxylate or alkaline earth metal carboxylate group, or a hydroxyl or amino group, an aromatic residue which comprises carboxylic acid or sulfonic acid groups or alkali metal carboxylate or sulfonate or alkaline earth metal carboxylate or sulfonate groups, or may together with the nitrogen atom to which they bond, form a morpholine ring x represents a hydrogen atom or the group -coch3 and m represents a hydrogen atom, a monovalent or divalent metal ion, or a substituted or unsubstituted ammonium group. 13. the method according to claim 9, whereby the at least one vinyl-copolymer in the second aqueous composition comprises a compound represented by the formula [ftimg=59675804]14. the method according to claim 9, whereby the first aqueous composition additionally comprises at least one sugar, in particular corn-syrup and/or glucose, at least one alkaline compound, in particular sodium hydroxide, at least one preservative, and at least one defoamer. 15. the method according to o claim 9, whereby the first aqueous composition comprises about 50 to 100 parts per weight of at least one calcium lignosulfonate, about 10 to 50 parts per weight of at least one amine, in particular triethanolamine, about 0 to 10 parts per weight of at least one sugar, in particular corn-syrup, and/or glucose about 0 to 3 parts per weight of at least one alkaline compound, in particular sodium hydroxide about 0 to 3 parts per weight of at least one preservative, and about 0 to 3 parts per weight of at least one defoamer and, the second aqueous composition comprises about 10 to 90 parts per weight of at least one vinyl-copolymer, about 10 to 90 parts per weight at least one sugar, in particular glucose. 16. concrete prepared according to the method according to claim 9. 17. concrete according to claim 16, whereby the concrete is a concrete with a cement content ?250 kg/m3 and a content of fines including swelling clays passing 200 mesh (corresponding to 74 microns) ?2 percent, based on the weight of the total concrete.

Results: 7

Yenny Campos

Search history

- Search 1: TAC=(Water-reducing admixture for concret and calcium lignosulfonate and vinyl-copolymer and glucosa) (Results 0)
- Search 2: TAC=(Water-reducing admixture for concret and calcium lignosulfonate and vinyl-copolymer) (Results 0)
- Search 3: TAC=(Water-reducing admixture for concret and calcium lignosulfonate) (Results 0)
- Search 4: TAC=(Water-reducing admixture for concret) (Results 0)
- Search 5: TAC=(Water reducing admixture for concret) (Results 0)
- Search 6: TAC=(Mid-range water reducers (mrwr) for concrets) (Results 1)
- Search 7: [SP]: 1. a water-reducing admixture for concrete, comprising a first composition comprising at least one calcium lignosulfonate and a second composition comprising at least one vinyl-copolymer, and at least one sugar. 2. the water-reducing admixture according to claim 1, whereby the first composition additionally comprises at least one amine, in particular triethanolamine 3. the water-reducing admixture according to claim 1, whereby the at least one vinyl-copolymer in the second composition comprises a substantially water soluble linear copolymer of monomeric units selected from vinyl acetate and vinyl alcohol with monomeric units of n-substituted maleamic acid in a molar ratio of 1:1, said copolymer represented by formula (a) [ftimg=59675801] wherein r1 is hydrogen, r2 is an unsubstituted c1 to c4-alkyl residue, a c1 to c10-alkyl residue which comprises an alkali metal carboxylate or alkaline earth metal carboxylate group, or a hydroxyl or amino group, an aromatic residue which comprises carboxylic acid or sulfonic acid groups or alkali metal carboxylate or sulfonate or alkaline earth metal carboxylate or sulfonate groups, or may together with the nitrogen atom to which they bond, form a morpholine ring x represents a hydrogen atom or the group -coch3 and m represents a hydrogen atom, a monovalent or divalent metal ion, or a substituted or unsubstituted ammonium group. 4. the water-reducing admixture according to claim 1, whereby the at least one vinyl-copolymer in the second composition comprises a compound represented by the formula [ftimg=59675802]5. the water-reducing admixture according to claim 1, whereby the first composition additionally comprises at least one sugar, in particular corn-syrup and/or glucose, at least one alkaline compound, in particular sodium hydroxide, at least one preservative, and at least one defoamer. 6. the water-reducing admixture according to claim 1, comprising a first composition comprising about 50 to 100 wt.- percent of at least one calcium-ligno-sulfonate, about 0 to 5 wt.- percent of at least one amine, in particular triethanolamine, about 0 to 10 wt.- percent of at least one sugar, in particular corn-syrup and/or glucose, about 0 to 3 wt.- percent of at least one alkaline compound, in particular sodium hydroxide about 0 to 3 wt.- percent of at least one preservative, and about 0 to 3 wt.- percent of at least one defoamer and, a second composition comprising about 10 to 90 weight percent of at least one vinyl-copolymer, and about 10 to 90 wt.- percent of at least one sugar, in particular glucose. 7. a method for reducing the water consumption in the preparation of a concrete, comprising the admixture according to claim 1. 8. the method according to claim 7, whereby the concrete is a concrete with a cement content ?250 kg/m3 and a content of fines including swelling clays passing 200 mesh (corresponding to 74 microns) ?2 percent, based on the weight of the total concrete. 9. a method for preparing a concrete comprising the steps: admixing a concrete mix with a first aqueous composition comprising water and at least one calcium lignosulfonate and admixing the mix obtained with a second aqueous composition comprising water, at least one vinyl-copolymer, and at least one sugar. 10. the method according to claim 9, whereby the first aqueous composition comprises 60 to 99 wt.- percent, in particular about 80 to 95 wt.- percent, of the total amount of water used for preparing the concrete, and the second aqueous composition comprises about 1 to 40 wt.- percent, in particular about 5 to 20 wt.- percent, of the total amount of water used for preparing the concrete. 11. the method according to claim 9, whereby the first aqueous composition additionally comprises an amine, in particular triethanolamine. 12. the method according to claim 9, whereby the at least one vinyl-copolymer in the second aqueous composition comprises a substantially water soluble linear copolymer of monomeric units selected from vinyl acetate and vinyl alcohol with monomeric units of n-substituted maleamic acid in a molar ratio of 1:1, said copolymer represented by formula (a) [ftimg=59675803] wherein r1 is hydrogen, r2 is an unsubstituted c1 to c4-alkyl residue, a c1 to c10-alkyl residue which comprises an alkali metal carboxylate or alkaline earth metal carboxylate group, or a hydroxyl or amino group, an aromatic residue which comprises carboxylic acid or sulfonic acid groups or alkali metal carboxylate or sulfonate or alkaline earth metal carboxylate or sulfonate groups, or may together with the nitrogen atom to which they bond, form a morpholine ring x represents a hydrogen atom or the group -coch3 and m represents a hydrogen atom, a monovalent or divalent metal ion, or a substituted or unsubstituted ammonium group. 13. the method according to claim 9, whereby the at least one vinyl-copolymer in the second aqueous composition comprises a compound represented by the formula [ftimg=59675804]14. the method according to claim 9, whereby the first aqueous composition additionally comprises at least one sugar, in particular corn-syrup and/or glucose, at least one alkaline compound, in particular sodium hydroxide, at least one preservative, and at least one defoamer. 15. the method according to o claim 9, whereby the first aqueous composition comprises about 50 to 100 parts per weight of at least one calcium lignosulfonate, about 10 to 50 parts per weight of at least one amine, in particular triethanolamine, about 0 to 10 parts per weight of at least one sugar, in particular corn-syrup, and/or glucose about 0 to 3 parts per weight of at least one alkaline compound, in particular sodium hydroxide about 0 to 3 parts per weight of at least one preservative, and about 0 to 3 parts per weight of at least one defoamer and, the second aqueous composition comprises about 10 to 90 parts per weight of at least one vinyl-copolymer, about 10 to 90 parts per weight at least one sugar, in particular glucose. 16. concrete prepared according to the method according to claim 9. 17. concrete according to claim 16, whereby the concrete is a concrete with a cement content ?250 kg/m3 and a content of fines including swelling clays passing 200 mesh (corresponding to 74 microns) ?2 percent, based on the weight of the total concrete. (Results 7)
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Title: Concrete water-reducing admixture

Abstract: Source: US4205993A A water-reducing admixture for use in hydraulic cement compositions comprising about 25 parts by weight of a lignosulfonic acid salt, from about 6 to 16 parts of calcium formate; and from about 2 to 8 parts of monosaccharides.

Classifications:

International (IPC 8-9): C04B28/02 (Advanced/Invention)

International (IPC 1-7): C04B13/20 C04B7/352 C04B7/353

CPC: C04B28/02

European: C04B28/02

US: 106/726 106/728 106/809 106/823 106/92

Family:

Publication number	Publication date	Application number	Application date
BR7906651 A	19800624	BR19790006651	19791016
US4205993 A	19800603	US19780952306	19781018

Priority:

US19780952306 19781018

Probable Assignee: WR GRACE AND CO CONN

Assignee(s): (std): GRACE W R AND CO

Assignee(s): W R GRACE AND CO ; WR GRACE AND CO ; WR GRACE AND CO CONN ; GRACE W R and

Inventor(s): (std): GAIDIS J ; GAIDIS JAMES M ; MORRY A ; ROSENBERG ARNOLD M

Title: Water reducing agent with reduced air

Abstract: Source: US4351671A Additive, e.g., ethoxylated nonylphenol, for lignin type water-reducing agent in hydraulic cement compositions, reduces air entrainment in the concrete mix.

Classifications:

International (IPC 8-9): C04B24/02 C04B24/18 C04B24/24 C04B28/02 (Advanced/Invention)

International (IPC 1-7): B28B C04B13/20 C04B13/24 C04B24/02 C04B24/18 C04B24/24 C04B28/02 C04B7/35 C04B7/354 C07G1/00 H01L25/04 H01L31/02

CPC: C04B28/02

European: C04B28/02

US: 106/804 106/809 106/823 106/90 524/6

Family:

Publication number	Publication date	Application number	Application date
AR226968 A1	19820831	AR19820289074	19820412
AU198279840 A1	19821021	AU19820079840	19820126
AU546030 B2	19850808	AU19820079840	19820126
BR8108239 A	19830412	BR19810008239	19811217
DE3212487 A1	19821104	DE19823212487	19820403
FR2504118 A1	19821022	FR19820006425	19820414
GB2096591 A1	19821020	GB19820005951	19820301
GB2096591 B2	19840510	GB19820005951	19820301
HK78584 A	19841026	HK19840000785	19841018
IT1153966 A	19870121	IT19820020323	19820322
IT8220323 A0	19820322	IT19820020323	19820322
JP1047419 B4	19891013	JP19820016474	19820205
JP57170855 A2	19821021	JP19820016474	19820205
MY8500692 A	19851231	MY19850000692	19851230
NZ199063 A	19840824	NZ19810199063	19811125
PH17435 A	19840823	PH19820027132	19820414
SG8490456 A	19850329	SG19840090456	19840623
US4351671 A	19820928	US19810254235	19810415
ZA8108251 A	19830126	ZA19810008251	19811127

Priority:

US19810254235 19810415

Probable Assignee: WR GRACE AND CO CONN

Assignee(s): (std): GRACE W R AND CO ; GRACE W R LTD

Assignee(s): W R GRACE AND CO ; WR GRACE AND CO ; WR GRACE AND CO CONN ; GRACE AND CO ; GRACE AND CO W R

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Inventor(s): ROORENSU JOSEFU Kainto ; LAWRENCE JOSEPH Kindt ; JEEMUZU MAIKERU GAIDEISU ; JAMES MICHAEL GAIDIS ; ARNOLD MORRY ROSENBERG JAMES MICHAEL GAIDIS ET LAW ; ARNOLD MORRY ROSENBERG ; ARNOLD MORRY ROSENBERG JAMES MICHAEL GAIDIS ET...

Title: Hydraulic cement composition

Abstract: Source: US4906298A A hydraulic cement composition comprising hydraulic cement and a copolymer of 60 to 85 mol percent of an alpha,beta-unsaturated dicarboxylic acid and 40 to 15 mol percent of an olefin or a water-soluble salt thereof, said copolymer having a number average molecular weight of 300 to 10,000 and containing not more than 10 percent by weight of a high-molecular-weight polymer having a molecular weight of at least 20,000.

Classifications:

International (IPC 8-9): C04B24/18 C04B24/22 C04B24/26 C04B24/30 C04B28/02 C04B28/04 C08F220/00 C08F220/04

C08F222/02 (Advanced/Invention);

C04B103/30 C04B103/40 (Advanced/Non-invention);

C04B24/00 C04B28/00 (Core/Invention)

International (IPC 1-7): C04B103/30 C04B103/40 C04B103:30 C04B103:40 C04B24/18 C04B24/22 C04B24/26 C04B24/30 C04B24:18

C04B24:22 C04B24:26 C04B24:30 C04B28/02 C04P7/02 C08F222/02

CPC: C04B24/2664 C04B28/04

European: C04B24/26R C04B28/04

US: 106/314 106/725 106/726 106/727 106/90 106/97 524/5

Family:

Publication number	Publication date	Application number	Application date
JP1599978 C3	19910131	JP19840270323	19841221
JP2022020 B4	19900517	JP19840270323	19841221
JP2042200 C3	19960409	JP19850017427	19850131
JP2120708 C3	19961220	JP19850033367	19850221
JP2122138 C3	19961220	JP19850045840	19850308
JP2122139 C3	19961220	JP19850045841	19850308
JP5015651 B4	19930302	JP19850045841	19850308
JP5015652 B4	19930302	JP19850033367	19850221
JP5015653 B4	19930302	JP19850045840	19850308
JP61151054 A2	19860709	JP19840270323	19841221
JP61178455 A2	19860811	JP19850017427	19850131
JP61197455 A2	19860901	JP19850033367	19850221
JP61205647 A2	19860911	JP19850045841	19850308
JP61205653 A2	19860911	JP19850045840	19850308
JP7064610 B4	19950712	JP19850017427	19850131
US4906298 A	19900306	US19880228823	19880802

Priority:

JP19840270323 19841221 JP19850017427 19850131 US19850809867 19851217

JP19850045841 19850308 JP19850033367 19850221 JP19850045840 19850308

Probable Assignee: NIPPON ZEON CO

Assignee(s): (std): NIPPON ZEON CO

Assignee(s): NIPPON ZEON CO LTD

Inventor(s): (std): SUMINO HIROMITSU ; NATSUUME YOSHIO ; NATSUUME TADAO ; MIKI YOSHIKI ; KADONO HIROMITSU

Inventor(s): NATSUUME YOSHIO

Title: Strength enhancing additive and water repellant mortars containing same.

Abstract: Source: EP0461738A1 The present invention relates to an additive for mortars which provides a mortar having good water repellency, excellent adhesion to difficult substrates, e.g. water repellant masonry bricks and blocks, and superior compressive strength. More particularly, the present invention relates to such an additive which comprises a water repelling agent, a synthetic latex, an alkanolamine, and a set retarding agent.

Classifications:

International (IPC 8-9): C04B24/00 C04B24/04 C04B24/12 C04B24/18 C04B24/26 C04B28/00 C04B28/04 C09K3/18 (Advanced/Invention); C04B28/00 C09K3/18 (Advanced/Non-invention); C04B24/00 C04B28/00 C09K3/18 (Core/Invention)

International (IPC 1-7): C04B24/00 C04B24/04 C04B24/06 C04B24/08 C04B24/12 C04B24/18 C04B24/24 C04B24/26 C04B24/38 C04B28/00 C04B28/04 C09K3/18

CPC: C04B24/00 C04B28/04 C04B2111/27

European: C04B24/00 C04B28/04 M04B111/27

Family:

Publication number	Publication date	Application number	Application date
AT117280 E	19950215	AT19910250150T	19910608
AU199178347 A1	19911219	AU19910078347	19910612
AU638134 B2	19930617	AU19910078347	19910612
CA2044362 AA	19911213	CA19912044362	19910611
DE69106780 D1	19950302	DE19916006780	19910608
DE69106780 T2	19950518	DE19916006780T	19910608
DK0461738 T3	19950320	DK19910250150T	19910608
EP0461738 A1	19911218	EP19910250150	19910608
EP0461738 B1	19950118	EP19910250150	19910608
ES2067141 T3	19950316	ES19910250150T	19910608
GR3015386 T3	19950630	GR19950400539T	19950313
JP4254451 A2	19920909	JP19910166452	19910611
NZ238487 A	19921028	NZ19910238487	19910611
ZA9104463 A	19920325	ZA19910004463	19910611

Priority:

US19900536833 19900612 CA19912044362 19910611

Probable Assignee: GRACE W R AND CO

Assignee(s): (std): GRACE W R AND CO

Assignee(s): GRACE W R AND CO CONN ; W R GRACE AND CO ; W R GRACE AND CO CONN ; W R GRACE AND CO CONN NEW YORK N Y US ; WR GRACE AND CO CONN ; CHIN DAVID

Inventor(s): (std): CHIN DAVID ; DAVID CHIN ; DEBITSUDO CHIN

Inventor(s): CHIN DAVID CHARLESTOWN MASSACHUSETTS 02129 US

Designated states: AT BE CH DE DK ES FR GB GR IT LI LU NL SE

Title: WATER-SOLUBLE COPOLYMERS OF VINYLACETATE AND MALEAMIC ACIDS AND USE AS FLUIDIZERS HIGH-RANGE WATER-REDUCERS FOR AQUEOUS SUSPENSIONS

Abstract: Source: US5633310A Novel water-soluble linear copolymers of vinylacetate with monomeric addition products of amines, amino acids, amino groups containing aromatic sulfonic acids, amino alcohols of maleic anhydride. The copolymers are useful as fluidizers in water containing solid matter suspensions.

Classifications:

International (IPC 8-9): C04B24/26 C08F222/38 (Advanced/Invention);
C04B24/00 C08F222/00 (Core/Invention)

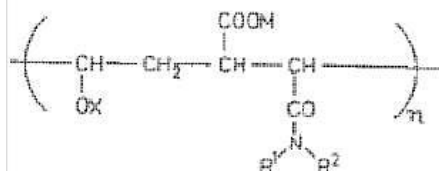
International (IPC 1-7): B01F17/52 C04B24/26 C08F218/08 C08F22/38 C08F222/36
C08F222/38 C08K3/34 C08L33/24

CPC: C04B24/2623 C04B24/2652 C04B2103/32 C04B2103/408 C08F222/38 Y10S516/07

European: C04B24/26F C04B24/26N C08F222/38 M04B103/32 M04B103/40P

US: 106/696 106/727 106/728 106/778 106/790 252/357 516/42 516/43 516/79 516/88
516/93 516/DIG.7 524/5 524/542 524/555 525/502 526/304

PatBase - JP6256055_A2



Family:

Publication number	Publication date	Application number	Application date
AT148135 E	19970215	AT19920122027T	19921228
DE0604676 T1	19950316	DE19920122027T	19921228
DE69217071 D1	19970306	DE19926017071	19921228
DE69217071 T2	19970507	DE19926017071T	19921228
DK0604676 T3	19970728	DK19920122027T	19921228
EP0604676 A1	19940706	EP19920122027	19921228
EP0604676 B1	19970122	EP19920122027	19921228
ES2056042 T1	19941001	ES19920122027T	19921228
ES2056042 T3	19970401	ES19920122027T	19921228
GR3022825 T3	19970630	GR19970400499T	19970317
GR94300059 T1	19940930	GR19940300059T	19940930
JP6256055 A2	19940913	JP19930338203	19931228
US5633310 A	19970527	US19930174057	19931228

Priority:

EP19920122027 19921228

Probable Assignee: SIKA VORM KASPAR WINKLER AND CO AG

Assignee(s): (std): SIKA AG

Assignee(s): SIKA AG VORM KASPAR WINKLER AND CO ; SIKA AG VORMALS KASPAR WINKLER AND CO ZUERICH CH ; SIKA VORM KASPAR WINKLER AND CO AG

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Inventor(s): SULSER UELI CH 8102 OBERENGSTRINGEN CH ; HUBER ANNA CH 8135 LANGNAU A A

Designated states: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

Title: Improved ligninsulfonate concrete admixtures

Abstract: Source: EP0845444A1 The invention relates to a blend of ligninsulfonate and a novel water soluble polymer which can be used as a concrete admixture to provide extended workability without essentially retarding the setting time and the strength gain.

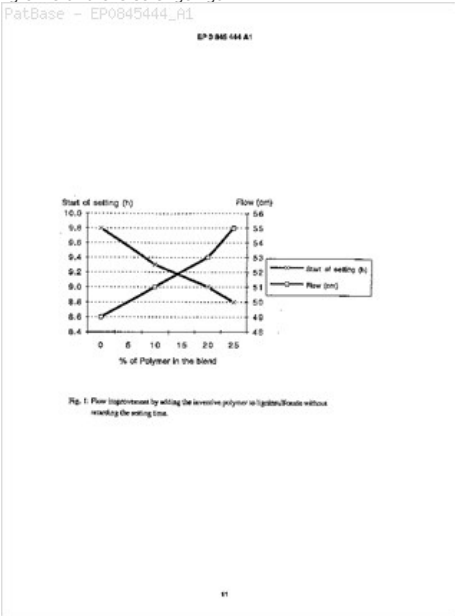
Classifications:

International (IPC 8-9): C04B24/18 C04B24/26 C04B28/02 (Advanced/Invention); C04B24/00 C04B28/00 (Core/Invention)

International (IPC 1-7): C04B103/30 C04B24/18 C04B24/26 C04B28/02

CPC: C04B24/18 C04B24/2652 C04B28/02

European: C04B24/18 C04B24/26N C04B28/02



Family:

Publication number	Publication date	Application number	Application date
AT212325 E	20020215	AT19970115059T	19970830
DE69710035 D1	20020314	DE19976010035	19970830
DE69710035 T2	20021114	DE19976010035T	19970830
DK0845444 T3	20020506	DK19970115059T	19970830
EP0845444 A1	19980603	EP19970115059	19970830
EP0845444 B1	20020123	EP19970115059	19970830
ES2168555 T3	20020616	ES19970115059T	19970830
JP10167788 A2	19980623	JP19970304384	19971106
NO314995 B1	20030623	NO19960005105	19961129
NO965105 A	19980602	NO19960005105	19961129
NO965105 A0	19961129	NO19960005105	19961129
PT845444 T	20020628	PT19970115059T	19970830
TR9701454 A2	19980622	TR19970001454	19971128

Priority:
NO19960005105 19961129

Probable Assignee: SIKA AG

Assignee(s): (std): SIKA AG

Assignee(s): SIKA AG VORM KASPAR WINKLER AND CO ; SIKA AG VORM KASPAR WINKLER AND CO SIKA SA CI DEVANT KASPAR WINKLER AND CO SIKA SA GIA KASPAR WINKLER AND CO ; SIKA AG VORMALS KASPAR WINKLER AND CO ; SIKA VORM KASPAR WINKLER AND CO SIKA CI DEV AG SA ; SIKA VORM KASPAR WINKLER AND CO AG

Inventor(s): (std): MADER URS ; MADER URS DR ; MAEDER DR ; MAEDER URS ; MAEDER URS DR ; MODER URS ; SCHOBER DR ; SCHOBER IRENE ; SCHOBER IRENE DR ; BUERGE THEODOR A ; BURGE THEODOR A ; IRENE DR SCHOBER ; URS DR MAEDER

Inventor(s): URS MADER ; URS MAEDER ; IRENE SCHOBER ; THEODOR A BURGE

Designated states: AT BE CH DE DK ES FR GB GR IE IT LI NL PT SE

Title: MID-RANGE WATER REDUCERS (MRWR) FOR CONCRETS

Abstract: Source: US2014194558A Provided is a water-reducing admixture for concrete that includes a first composition, a second composition, and at least one sugar. The first composition includes at least one calcium lignosulfonate; the second composition includes at least one vinyl-copolymer.

Classifications:

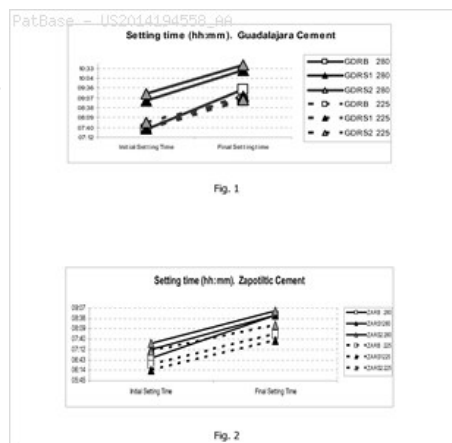
International (IPC 8-9): C04B103/30 C04B24/16 C04B24/26 C04B24/28

C04B28/02 (Advanced/Invention);

C04B103/30 (Advanced/Non-invention)

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Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW