

Search query (2): [SP]: 1. a concrete mix design having a slump class from s1 to s5 or a flow class from f1 to f6 and a workability retention between 10 minutes and 120 minutes, comprising: from 150 to 600 kg of cement per cubic meter of concrete,aggregates selected from the group consisting of sand, fine aggregates, coarse aggregates or combinations thereof containing between 0.5 weight percent and 75 weight percent of phyllosilicatesan admixture system 1 which is based on a 100 percent polycarboxylate ether based copolymer (pce), the admixture system 1 comprising at least one component b1 being a pce copolymer characterized by:(i) having its negative charge temporarily blocked,(ii) having an esterification degree of between 5 percent -50 percent,(iii) with polyoxyalkylene side chains with 750 to 8000 da,(iv) with a blocking of the carboxylic acids of 0.1 to 90 mole percent units,(v) the backbone of the pce b1 consisting of carboxylic acids, salt thereof and dicarboxylic acid, anhydride and/or salts thereof,(vi) the total molecular weight of pce b1 being in a range between 10,000 and 1,000,000 andthe admixture system 1 further comprising at least a second pce. 2. a concrete mix design according to claim 1, wherein the second pce of the admixture system 1 is a polycarboxylate ether based copolymer (pce) a1, characterized by: (a) an esterification degree of between 5 percent and 50 percent,(b) polyoxyalkylene side chains with 750 to 8000 da and(c) the backbone of the pce a1 consisting of carboxylic acids, salt thereof and dicarboxylic acid, anhydride and/or salts thereof and(d) the copolymer a1, having a total molecular weight between 15,000 and 1,000,000 da. 3. a concrete mix design according to claim 1, wherein the second pce of the admixture system 1 is a polycarboxylate ether based copolymer (pce) a2, characterized by: (a') an esterification degree of between 5 percent and 20 percent,(b') polyoxyalkylene side chains with approximately 5000 da, (c') blocking of the carboxylic acids of between 25 to 55 mole percent units(d') he pce a2 backbone consisting of methacrylic acids and salts thereof with a total molecular weight of about 50,000 da and(e') the pce b1 being characterized by a blocking of its carboxylic above 55 mole percent units 4. a concrete mix design according to claim 2, characterized in that the ratio a1/b1 in the admixture system 1 is between 0.05 to 1. 5. a concrete mix design according to claim 3, characterized in that the ratio a2/b1 in the admixture system 1 is between 0.05 to 1.2. 6. a concrete mix design according to any claim 1, further comprising an additional plasticizer forming a second admixture system 2. 7. a concrete mix design according to claim 1, wherein the concrete mix design includes a dosage range of the admixture system 1 of between 0.002 weight percent to 0.2 weight percent of active solid content with respect to the aggregates containing phyllosilicates. 8. a concrete mix design according to claim 7, wherein the concrete mix design includes a dosage range of the admixture system 1 of between 0.002 weight percent to 0.11 weight percent of active solid content with respect to the aggregates containing phyllosilicates. 9. a concrete mix design according to claim 6, wherein the concrete mix design includes a dosage range of the second admixture system 2 of between 0.03-0.75 percent.wt of active solid content with respect to the cement. 10. a concrete mix design according to claim 1, wherein the admixture system 1 has a blocking of the carboxylic acids of 20 to 90 mole percent units. 11. a concrete mix design according to claim 10, wherein the admixture system 1 has a blocking of the carboxylic acids of 45 to 90 mole percent units. 12. a concrete mix design according to claim 6, wherein the second admixture system 2 has a blocking of the carboxylic acids of 20 to 90 mole percent units. 13. a concrete mix design according to claim 6, wherein the second admixture system 2 has a blocking of the carboxylic acids of 45 to 90 mole percent units. 14. a concrete mix design having a slump class from s1 to s5 or a flow class from f1 to f6 and a workability retention between 10 minutes and 120 minutes, comprising: from 150 to 600 kg of cement per cubic meter of concrete,aggregates selected from the group consisting of sand, fine aggregates, coarse aggregates or combinations thereof containing between 0.5 weight percent and 75 weight percent of phyllosilicates,a first admixture system 1 which is based on a 100 percent polycarboxylate ether based copolymer (pce), the admixture system 1 comprising at least one component b1 being a pce copolymer characterized by: (i) having its negative charge temporarily blocked,(ii) having an esterification degree of between 5 percent -50 percent,(iii) with polyoxyalkylene side chains with 750 to 8000 da,(iv) with a blocking of the carboxylic acids of 0.1 to 90 mole percent units,(v) the backbone of the pce b1 consisting of carboxylic acids, salt thereof and dicarboxylic acid, anhydride and/or salts thereof,(vi) the total molecular weight of pce b1 being in a range between 10,000 and 1,000,000 andthe admixture system 1 further comprising at least a second pce, and an additional plasticizer forming a second admixture system 2. 15. a concrete mix design according to claim 14, wherein the second pce of the admixture system 1 is a polycarboxylate ether based copolymer (pce) a1, characterized by: (a) an esterification degree of between 5 percent and 50 percent,(b) polyoxyalkylene side chains with 750 to 8000 da and(c) the backbone of the pce a1 consisting of carboxylic acids, salt thereof and dicarboxylic acid, anhydride and/or salts thereof and(d) the copolymer a1, having a total molecular weight between 15,000 and 1,000,000 da. 16. a concrete mix design according to claim 14, wherein the second pce of the first admixture system 1 is a polycarboxylate ether based copolymer (pce) a2, characterized by: (a') an esterification degree of between 5 percent and 20 percent,(b') polyoxyalkylene side chains with approximately 5000 da,(c') blocking of the carboxylic acids of between 25 to 55 mole percent units(d') he pce a2 backbone consisting of methacrylic acids and salts thereof with a total molecular weight of about 50,000 da and(e') the pce b1 being characterized by a blocking of its carboxylic above 55 mole percent units 17. a concrete mix design according to claim 15, characterized in that the ratio a1/b1 in the admixture system 1 is between 0.05 to 1. 18. a concrete mix design according to claim 16, characterized in that the ratio a2/b1 in the admixture system 1 is between 0.05 to 1.2. 19. a concrete mix design according to claim 14, wherein the concrete mix design includes a dosage range of the admixture system 1 of between 0.002 weight percent to 0.2 weight percent of active solid content with respect to the aggregates containing phyllosilicates and a dosage range of the second admixture system 2 of between 0.03-0.75 percent.wt of active solid content with respect to the cement. 20. a concrete mix design according to claim 1, wherein at least of the admixture system 1 or the admixture system 2 has a blocking of the carboxylic acids of 20 to 90 mole percent units.

Results: 6

1) Family number: 58451814 (US2016168033A)

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Title: ADMIXTURES AND ADMIXTURE FORMATION USED IN CONCRETE TECHNOLOGY

Abstract: Source: US2016168033A A concrete mix design having a slump class from S1 to S5 or a flow class from F1 to F6 and a workability retention between 10 minutes and 120 minutes, comprising from 150 to 600 kg of cement per cubic meter of concrete, aggregates selected from the group consisting of sand, fine aggregates, coarse aggregates or combinations thereof containing between 0.5 weight percent and 75 weight percent of phyllosilicates, is characterized in that the concrete mix design includes an admixture system 1 which is based on 100 percent polycarboxylate ether based copolymer (PCE), the admixture system 1 comprising at least one component B1 being a PCE copolymer.

Classifications:

International (IPC 8-9): C04B C04B24/26 C04B28/00 C04B28/02 C04B28/28 C04B40/00 C08F220/26

C08F8/40 (Advanced/Invention);

C04B (Subclass/Invention)

CPC: C04B28/02 C04B28/28 C04B40/0039

US: 524/5

Family:

Publication number	Publication date	Application number	Application date
CL2016000231 A1	20160819	CL20160000231	20160128
CR20160056 A	20160603	CR20160000056	20160201
EP3027575 A1	20160608	EP20140750163	20140801
IL243908 A0	20160421	IL20140243908	20140801
MX2016001277 A1	20160407	MX20160001277	20140801
US2016168033 AA	20160616	US20140909025	20140801
WO15014412 A1	20150205	WO2013EP66296	20130802
WO15014990 A1	20150205	WO2014EP66605	20140801

Priority:

EP20140750163 20140801 WO2013EP66296 20130802 WO2014EP66605 20140801

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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 IR 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 NZ OM PA PE PG PH PL PT QA RO RS RU RW SA 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

2) Family number: 11428148 (WO9947468A1)

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Title: WATER SOLUBLE OR WATER DISPERSIBLE DISPERSING AGENT FOR CEMENT COMPOSITIONS AND MINERAL PARTICLE AQUEOUS SUSPENSION, AND ADDITIVES CONTAINING SUCH DISPERSING AGENT

Abstract: The invention concerns a water soluble or water dispersible dispersing agent for cement composition and mineral particle aqueous suspensions, containing carboxylic functions, optionally partially or totally salified and polyether chains It is obtained by partial esterification catalysed by introducing a base, and reacting: at least a polycarboxylic acid obtained by polymerising at least an unsaturated carboxylic acid, containing on average at least 6 carboxylic functions per molecule; and at least a polyether containing a free hydroxyl group capable of reacting with one carboxylic function of said polycarboxylic acid.

Classifications:
International (IPC 8-9): C04B24/26 C04B24/32 C08G81/02 C08L71/02 (Advanced/Invention); C04B24/00 C08G81/00 C08L71/00 (Core/Invention)
International (IPC 1-7): C04B103/30 C04B24/26 C04B24/32 C08G81/02 C08L71/02
CPC: C04B24/243 C04B24/2647 C04B40/0039 C04B2103/408 C08G81/025
European: C04B24/24D C04B24/26K10 C04B40/00D4 C08G81/02F4 M04B103/40P

Family:

Publication number	Publication date	Application number	Application date
AU199930389 A1	19991011	AU19990030389	19990319
FR2776285 A1	19990924	FR19980003634	19980319
FR2776285 B1	20000609	FR19980003634	19980319
WO9947468 A1	19990923	WO1999FR00655	19990319

Priority:
FR19980003634 19980319 WO1999FR00655 19990319

Probable Assignee: CHRYSO

Assignee(s): (std): CHRYSO ; GUICQUERO JEAN PIERRE ; LAFARGE SA ; MAITRASSE PHILIPPE ; MOSQUET MARTIN ; SERS ALPHONSE

Assignee(s): LAFARGE S A

Inventor(s): (std): GUICQUERO JEAN PIERRE ; MAITRASSE PHILIPPE ; MOSQUET MARTIN ; MOSQUET MARTIN ANTOINE ; SERS ALPHONSE

Inventor(s): ALPHONSE SERS ; PHILIPPE MAITRASSE ; MARTIN MOSQUET ; JEAN PIERRE GUICQUERO

Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU ZA ZW

3) Family number: 32759081 (US2007287794A)

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Title: METHOD FOR INERTING IMPURITIES

Abstract: Source: US2007287794A The invention concerns a method for inerting clays in sand intended for preparing hydraulic compositions, comprising a step which consists in adding to the composition or one of its constituents a cationic polymer having a cationic charge density more than 0.5 meq/g and an intrinsic viscosity less than 1 dg/l.

Classifications:
International (IPC 8-9): C04B14/06 C04B14/10 C04B16/00 C04B16/04 C04B20/02 C04B20/10 C04B24/00 C04B24/10 C04B24/12 C04B24/26 C04B24/30 C04B24/32 C04B28/02 C04B28/28 C04B7/00 C08G12/16 C08G73/02 C08K3/00 (Advanced/Invention); C04B103/30 (Advanced/Non-invention); C04B14/02 C04B24/00 C04B28/00 C08G12/00 C08G73/00 (Core/Invention); C04B C08G (Subclass/Invention)
International (IPC 1-7): C04B24/30 C04B24/30
CPC: C04B28/02 C04B20/1018 C04B14/06 C04B20/02 C04B20/023 C04B24/2652 C04B24/30 C04B2201/10 C04B2201/20 C08G12/16 C08G73/0226
European: C04B14/06 C04B20/02 C04B20/02C C04B20/10B C04B24/26N C04B24/30 C04B28/02 C08G12/16 C08G73/02A9C M04B201/10 M04B201/20
US: 106/802 524/4 524/650

Family:

Publication number	Publication date	Application number	Application date
AT532756 E	20111115	AT20050802965T	20050921
AT532757 E	20111115	AT20050802926T	20050921
CA2575594 AA	20070130	CA20052575594	20050921
CA2583364 AA	20070312	CA20052583364	20050921
CA2583364 C	20120320	CA20052583364	20050921
CN100503502 C	20090624	CN200580034770	20050921
CN100515977 C	20090722	CN200580036199	20050921
CN101039886 A	20070919	CN200580034770	20050921
CN101044103 A	20070926	CN200580036199	20050921
DE602005031158 D1	20120105	DE200560031158T	20050921

DE602005031159 D1	20120105	DE200560031159T	20050921
EP1799624 A2	20070627	EP20050802965	20050921
EP1799624 B1	20111109	EP20050802965	20050921
EP1838643 A2	20071003	EP20050802926	20050921
EP1838643 B1	20111109	EP20050802926	20050921
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ES2376778 T3	20120316	ES20050802965T	20050921
FR2875496 A1	20060324	FR20040009968	20040921
FR2875496 B1	20061124	FR20040009968	20040921
FR2887541 A1	20061229	FR20050006594	20050628
FR2887541 B1	20071012	FR20050006594	20050628
FR2887542 A1	20061229	FR20050006596	20050628
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IN258437 B	20140110	IN2007DN02163	20070320
IN261365 B	20140627	IN2007DN02165	20070320
RU2007115060 A	20081027	RU20070115060	20050921
RU2007115063 A	20081110	RU20070115063	20050921
RU2363678 C2	20090810	RU20070115060	20050921
RU2388711 C2	20100510	RU20070115063	20050921
US2007287794 AA	20071213	US20050575612	20050921
US2008060556 AA	20080313	US20050575607	20050921
US2012316267 AA	20121213	US20120565473	20120802
US8257490 BB	20120904	US20050575612	20050921
US8425680 BB	20130423	US20120565473	20120802
US8834626 BB	20140916	US20050575607	20050921
WO06032785 A2	20060330	WO2005FR02342	20050921
WO06032785 A3	20070125	WO2005FR02342	20050921
WO06032786 A2	20060330	WO2005FR02344	20050921
WO06032786 A3	20070301	WO2005FR02344	20050921
ZA200702165 A	20090624	ZA20070002165	20070314
ZA200702181 A	20090429	ZA20070002181	20070315

Priority:

EP20050802926	20050921	EP20050802965	20050921	FR20040009968	20040921
FR20050006594	20050628	FR20050006596	20050628	US20050575612	20050921
WO2005FR02344	20050921	WO2005FR02342	20050921	US20070575612	20070320
US20120565473	20120802				

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

4) Family number: 34021825 (US2009234046A)

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Title: CONCRETE AND MORTAR ADMIXTURE

Abstract: Source: US2009234046A The invention relates to a copolymer, said copolymer consisting of, as structural units, (i) 0.1 to 50 mole percent of units derived from an ethylenically unsaturated monomer (a) having per one mole thereof 25 to 300 moles of C2-C3 oxyalkylene groups; (ii) 0.1 to 49.9 mole percent of units derived from a monomer (b) of an alkyl, alkenyl or hydroxyalkyl ester of an ethylenically unsaturated mono- or di-carboxylic acid; (iii) 0.1 to 90 mole percent units derived from a monomer (c) selected from the group consisting of an ethylenically unsaturated monocarboxylic acid, a salt thereof, an ethylenically unsaturated dicarboxylic acid, an anhydride thereof and a salt thereof; (iv) optionally up to 30 mole percent of other monomers. Said copolymer can be used as a concrete and/or mortar admixture that allows optimal flow ability and, at the same time, can maintain a specific consistency, fluidity and workability of the concrete independently of the cement type.

Classifications:

International (IPC 8-9): C04B24/00 C04B24/16 C04B24/22 C04B24/26 C04B24/30 C04B28/02 C08F22/02 C08F22/10 C08F22/38 C08F220/00 C08F290/06 C08G65/332 C08K3/00 (Advanced/Invention); C04B24/00 C04B28/00 C08F22/00 C08F220/00 C08F290/00 C08G65/00 C08K3/00 (Core/Invention)

CPC: C08F220/06 C04B24/2647 C04B28/02 C04B40/0039 C04B2103/32 C04B2103/408 C08F220/18

European: C04B24/26K10 C04B28/02 C04B40/00D4 C08F220/06 C08F220/18 M04B103/32 M04B103/40P

US: 524/5 524/5P 526/307.6 526/307.600S 526/318.2 526/318.200S 526/318.4 526/318.400S 526/318.43 526/318.430S

Family:

Publication number	Publication date	Application number	Application date
CA2605186 AA	20071016	CA20062605186	20060427
CA2605186 C	20130924	CA20062605186	20060427
DE602006031828 D1	20121025	DE200660031828T	20060427

DK1891126 T3	20121001	DK20060724624T	20060427
EP1734062 A1	20061220	EP20050012867	20050615
EP1891126 A1	20080227	EP20060724624	20060427
EP1891126 B1	20120905	EP20060724624	20060427
ES2394096 T3	20130117	ES20060724624T	20060427
JP2008543997 T2	20081204	JP20080516146T	20060427
JP5502321 B2	20140528	JP20080516146T	20060427
RU2007144495 A	20090610	RU20070144495	20060427
RU2390530 C2	20100527	RU20070144495	20060427
US2009234046 AA	20090917	US20060921184	20060427
WO06133762 A1	20061221	WO2006EP03951	20060427

Priority:

EP20050012867 20050615 EP20060724624 20060427 WO2006EP03951 20060427

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

5) Family number: 44233138 (US2011088599A) © PatBase

Title: SLUMP RETAINING ADMIXTURE FOR MODIFYING CLAY ACTIVITY IN CONCRETE

Abstract: Source: US2011088599A The present invention relates to the use of polycationic compound in combination with a hydroxycarboxylic acid or salt thereof to enhance slump retention in cements and concretes having clay-bearing aggregates, wherein the clay otherwise absorbs or diminishes the dosage efficiency of polycarboxylate superplasticizers.

Classifications:

International (IPC 8-9): C04B20/02 C04B24/02 C04B24/04 C04B24/06 C04B24/12 C04B24/26 C04B28/02 C04B40/00 C04B7/32 (Advanced/Invention); C04B20/00 C04B40/00 (Core/Invention)

CPC: C04B40/0039 C04B20/023 C04B2103/308

European: C04B20/02C C04B40/00D4 M04B103/30S

US: 106/718 106/727 106/728 106/803 106/823 106/823S

Family:

Publication number	Publication date	Application number	Application date
AU2009270173 AA	20100114	AU20090270173	20090710
AU2009270173 BB	20150115	AU20090270173	20090710
BRPI0915333 A2	20151027	BR2009PI15333	20090710
EP2303801 A1	20110406	EP20090787993	20090710
JP2011136844 A2	20110714	JP20080181296	20080711
JP5713524 B2	20150507	JP20080181296	20080711
MX2010013966 A1	20110215	MX20100013966	20090710
NZ589912 A	20131220	NZ20090589912	20090710
US2011088599 AA	20110421	US20090997723	20090710
US8685156 BB	20140401	US20090997723	20090710
WO10005117 A1	20100114	WO2009JP62931	20090710

Priority:

JP20080181296 20080711 WO2009JP62931 20090710

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Assignee(s): W R GRACE AND CO CONN ; WR GRACE AND CO CONN ; DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS ; GCP APPLIED TECHNOLOGIES INC ; GOLDMAN SACHS BANK USA COLLATERAL AGENT AS

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Inventor(s): BYONG WA CHUN ; SHU QIANG ZHANG ; HIDEO KOYATA

Agent(s): PHILLIPS ORMONDE FITZPATRICK; BENSON JOHN EVERETT; CRAIG K; PATENT PROFESSION ODAJIMA PATENT OFFICE CORP

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ 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 RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

6) Family number: 52165617 (US2014039098A) © PatBase

Title: COPOLYMERS HAVING GEM-BISPHOSPHONATE GROUPINGS

Abstract: Source: US2014039098A The invention relates to a copolymer comprising a main hydrocarbon chain and side groups including carboxylic groups and polyoxyalkylate groups, characterized in that it further includes gem-bisphosphonate groups, an admixture for suspensions of mineral particles comprising said copolymer and to a method for preparing said copolymer. Finally it relates to the use of said copolymer for fluidifying and maintaining fluid, suspensions of mineral particles and for reducing the sensitivity of hydraulic compositions to clays and alkaline sulfates. Finally it relates to a composition of mineral particles comprising this copolymer.

Classifications:

International (IPC 8-9): C04B16/04 C04B24/24 C04B24/26 C04B24/28 C04B28/00 C04B28/28 C07F9/38 C08F22/10 C08F220/26 C08F230/02 C08F8/00 C08F8/40 C08K3/00 C08L33/02 C08L33/08 (Advanced/Invention); C04B103/30 (Advanced/Non-invention)

CPC: C04B28/02 C04B2103/32 C04B2111/20 C04B2111/2015 C04B24/243 C04B24/2647 C08F230/02 C08F2220/286 C04B16/04 C08L33/08 C08F22/10 C08F220/26 C08F8/40 C07F9/386 C07F9/3873

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Family:

Publication number	Publication date	Application number	Application date
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