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Search 10: stac=(9 and 6) (Results 5)

**Title:** BIOLOGICAL ACTIVE COATING COMPONENTS, COATINGS, AND COATED SURFACES

**Abstract:** Disclosed herein are novel coatings and paints comprising a biomolecule composition, wherein the biomolecule composition comprises a phosphoric triester hydrolase. Also disclosed herein are methods of detoxification of a surface contaminated with an organophosphorus compound by contacting the surface with such a coating or paint. Also disclosed herein are novel coating and paint components derived from microorganisms.

**Classifications:**

**International (IPC 8-9):** A01N A01N63/00 A61F2/00 A61K38/46 A61K38/48 A61K38/54 A61K39/00 A61K47/48 A62D3/00 A62D3/02 A62D5/00 C09D C09D201/00 C09D5/00 C09D5/02 C09D5/14 C09D5/16 C09D7/12 C09J11/02 C12M1/34 C12N C12N11/08 C12N9/00 C12N9/14 C12N9/16 C12N9/48 C12N9/88 C12N9/90 C12S9/00 (Advanced/Invention); A62D101/02 A62D101/45 C07K17/00 C12N11/00 C12N11/08 C12N9/14 C12N9/16 (Advanced/Non-invention); A61K38/43 A62D3/00 C09D201/00 C09J11/02 C12N9/14 C12N9/48 C12S9/00 (Core/Invention); C07K17/00 C12N9/14 C12N9/16 (Core/Non-invention); C09D C12N (Subclass/Invention)

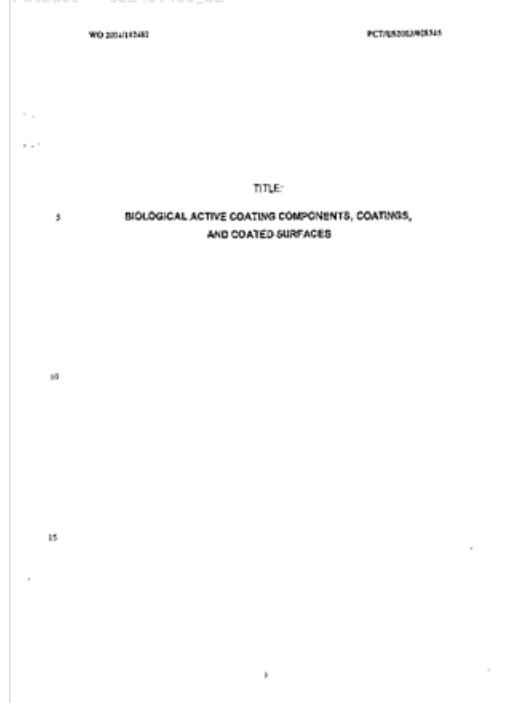
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**European:** A61K47/48 A61L2/00 A62D3/00F A62D3/00M12F A62D3/00M2 A62D3/02 C09D5/00 C09D5/02K2 C09D5/14 C09D5/16C7 C09D5/30 C09D5/34 C09D7/12D4 C09D7/12M C09J11/02 C09J11/08 C12N11/08 C12N11/16 C12N9/00 C12N9/14 C12N9/16 C12N9/88 C12N9/90 K62D101/02 K62D101/26 K62D101/45 M08L89/00

**US:** 106/124.1 106/150.1 106/150.3 106/153.1 106/155.1 106/18.32 424/185.1 424/185.100S 424/423 424/423S 424/94.2 424/94.200P 424/94.6 424/94.600P 424/94.63 424/94.630S 427/385.5 435/195 435/195S 435/212 435/212S 435/262.5 435/264 435/287.2 524/17

PatBase - GB2430436\_B2

**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| AU2003304222 AA    | 20050104         | AU20030304222      | 20030909         |
| AU2003304222 BB    | 20100204         | AU20030304222      | 20030909         |
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| AU2010201732 AA    | 20100527         | AU20100201732      | 20100430         |
| CA2538124 AA       | 20060307         | CA20032538124      | 20030909         |
| CA2538124 C        | 20100713         | CA20032538124      | 20030909         |
| EP1551927 A1       | 20050713         | EP20030816944      | 20030909         |
| EP1660596 A1       | 20060531         | EP20040718588      | 20040308         |
| GB200506979 A0     | 20050525         | GB20050006979      | 20030909         |
| GB200616715 A0     | 20061004         | GB20060016715      | 20030909         |
| GB2410249 A1       | 20050727         | GB20050006979      | 20030909         |
| GB2410249 B2       | 20061213         | GB20050006979      | 20030909         |
| GB2430436 A1       | 20070328         | GB20060016715      | 20030909         |
| GB2430436 B2       | 20070606         | GB20060016715      | 20030909         |
| HK1085234 A1       | 20060818         | HK20060107134      | 20060622         |
| HK1085234 A3       | 20060818         | HK20060107134      | 20060622         |
| HK1102286 A1       | 20080321         | HK20070110394      | 20070925         |
| HK1102286 A3       | 20071109         | HK20070110394      | 20070925         |
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| US2010248334 AA | 20100930 | US20060368087 | 20060303 |
| US2014193889 AA | 20140710 | US20140151455 | 20140109 |
| US2015328490 AA | 20151119 | US20150795608 | 20150709 |
| WO04112482 A2   | 20041229 | WO2003US28345 | 20030909 |
| WO04112482 C1   | 20050506 | WO2003US28345 | 20030909 |
| WO05026269 A1   | 20050324 | WO2004US07263 | 20040308 |

Priority:

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| US20020409102P | 20020909 | US20030655345 | 20030904 | US20030665345 | 20030904 |
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| US20070976676P | 20071001 | US20080243755 | 20081001 | AU20100201732 | 20100430 |
| US20140151455  | 20140109 | US20150795608 | 20150709 |               |          |

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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 KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

**Title:** ANTIFUNGAL PAINTS AND COATINGS

**Abstract:** Antifungal and antibacterial peptides, polypeptides and proteins as antifungal additives for paint and other coatings are disclosed, along with antifungal compositions, and coated surfaces with antifungal properties. Methods of using the coatings for treating and/or inhibiting growth of mold, mildew and other fungi and bacteria on objects such as building materials that are susceptible to such infestation are also disclosed.

**Classifications:**

**International (IPC 8-9):** A01N25/00 A01N33/08 A01N37/18 A01N37/44 A01N37/46 A01N63/00 A01N63/02 A01P1/00 A01P3/00 A61F13/00 A61K31/74 A61K38/00 A61K38/08 A61K38/10 A61K47/48 B05D3/00 B05D5/00 B08B3/00 B32B3/12 B32B5/02 B65D81/00 B65D85/84 C07K14/00 C07K14/435 C07K17/00 C07K2/00 C07K5/08 C07K5/10 C07K7/00 C07K7/06 C07K7/08 C08G63/91 C08L89/00 C09D C09D133/00 C09D189/00 C09D201/00 C09D5/14 C09D5/16 C09D7/00 C09D7/12 C09J11/08 C12N C12N11/16 C12N9/00 C12N9/16 C12N9/18 C12N9/20 C12N9/48 C12N9/76 C12N9/78 C12Q1/00 C12Q1/34 C12Q1/527 C12S9/00 (Advanced/Invention);

A01N33/00 A01N37/18 A01N37/44 A01N63/00 A01P1/00 A01P3/00 A61F13/00 A61K47/48 B05D3/00 C07K14/00 C07K5/00 C07K7/00 C08G63/00 C08L89/00 C09D201/00 C09D5/14 C09D5/16 C09D7/12 C09J11/00 C12N11/00 C12N9/00 C12N9/16 C12N9/48 C12N9/76 C12N9/78 (Core/Invention);

A01N C09D (Subclass/Invention)

**International (IPC 1-7):** A61K38/00 C08L89/00 C09D201/00 C09D5/14 C09D5/16

**CPC:** A01N37/46 C07K14/4723 A01N63/00 B08B17/02 C07K7/06 C07K7/08 C09D5/1693 C09D189/00 C12Q1/34 C12Q1/44 C12Q1/61 C09D5/1637 Y10T428/24149 Y10T442/2279 C09D5/1668 C09D5/008 D06M16/003 C09D7/63 C09D7/70 C09D7/65 C09D5/1625 A01N63/02 C08L89/00 C09D5/14 B29B13/00 B29C47/20

**European:** A01N37/46 A01N63/00 A01N63/02 B08B17/02 C07K7/06 C07K7/08 C09D5/00F C09D5/14 C09D5/16C3K C09D5/16C7 C09D5/16R C09D7/12D4 C09D7/12M C09D7/12S C12Q1/34 C12Q1/44 C12Q1/61 D06M16/00B M08L89/00

**US:** 106/124.1 106/124.100S 106/15.05 106/15.050P 106/15.050S 106/18.32 106/18.320P 106/18.320P 106/18.320S 106/2 106/2P 106/4 106/4S 106/501.1 106/501.100S 134/26 134/26P 206/216 206/216S 206/524.1 206/524.100S 222/1 222/1S 424/404 424/409 424/422 424/422P 424/426 424/426P 424/78.09 424/94.2 424/94.200P 424/94.61 424/94.64 427/331 427/331S 427/352 427/352S 427/414 427/414P 428/116 428/116S 435/174 435/174S 435/18 435/183 435/183S 435/18P 435/196 435/196S 435/197 435/197S 435/198 435/198S 435/212 435/212S 435/213 435/213S 435/227 435/227S 435/264 435/264S 435/4 435/4S 442/93 442/93S 514/1.1 514/1.100P 514/12 514/16 514/17 514/18 514/2 514/2.4 514/2.400S 514/21.4 514/21.5 514/21.8 514/3.3 514/3.300P 514/3.300S 521/55 521/55P 523/122 523/122S 524/17 524/17S 524/590 525/54.1 525/54.100S 530/324 530/324S 530/326 530/326S 530/327 530/327S 530/329 530/329S 530/330 530/330S 530/331 530/331S 530/350 530/350S

PatBase - W005007758\_A2

WD 200407758 PC1/US2004091718

SEQUENCE LISTINGS

&lt;110&gt; Reactive Surfaces, Ltd.

&lt;130&gt; Antifungal Paints and Coatings

&lt;150&gt; RACT-50451

&lt;160&gt; 68/689.334

&lt;170&gt; 2002-07-03

&lt;180&gt; Unknown

&lt;210&gt; 2004-07-03

&lt;260&gt; 138

&lt;270&gt; PatentIn version 3.1

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**Family:**

| Publication number | Publication date | Application number | Application date |
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| AU2004257205 AA    | 20050127         | AU20040257205      | 20040706         |
| AU2004257205 BB    | 20101216         | AU20040257205      | 20040706         |
| AU2011201077 AA    | 20110407         | AU20110201077      | 20110310         |
| EP1644452 A2       | 20060412         | EP20040756724      | 20040706         |
| EP1644452 B1       | 20161214         | EP20040756724      | 20040706         |
| EP2431429 A2       | 20120321         | EP20110168727      | 20040706         |
| EP2431429 A3       | 20120627         | EP20110168727      | 20040706         |
| HK1083693 A1       | 20060707         | HK20060104810      | 20060421         |
| HK1083693 A3       | 20060707         | HK20060104810      | 20060421         |
| HK1156652 A1       | 20120615         | HK20110110948      | 20111013         |
| HK1156652 A3       | 20120615         | HK20110110948      | 20111013         |
| IL173658 A0        | 20090211         | IL20060173658      | 20060209         |
| IL173658 A1        | 20120430         | IL20040173658      | 20040706         |
| IL218128 A0        | 20120329         | IL20040218128      | 20040706         |
| IL218129 A0        | 20120329         | IL20120218129      | 20120215         |
| IL218129 A1        | 20130930         | IL20040218129      | 20040706         |
| SG179021 A1        | 20120427         | SG20120015939      | 20100915         |
| US2005058689 AA    | 20050317         | US20040884355      | 20040702         |
| US2006141003 AA    | 20060629         | US20060368086      | 20060303         |
| US2009308277 AA    | 20091217         | US20090543072      | 20090818         |
| US2009308278 AA    | 20091217         | US20090543172      | 20090818         |
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| US2010233146 AA    | 20100916         | US20090474921      | 20090529         |
| US2011070376 AA    | 20110324         | US20100882563      | 20100915         |

|                 |          |               |          |
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| US2011219982 AA | 20110915 | US20110089479 | 20110419 |
| US2011224131 AA | 20110915 | US20110089459 | 20110419 |
| US2011240064 AA | 20111006 | US20110069864 | 20110323 |
| US2011250626 AA | 20111013 | US20110085061 | 20110412 |
| US2011269672 AA | 20111103 | US20110173684 | 20110630 |
| US2011319320 AA | 20111229 | US20110173243 | 20110630 |
| US2012010128 AA | 20120112 | US20110186734 | 20110720 |
| US2012010129 AA | 20120112 | US20110186794 | 20110720 |
| US2012017802 AA | 20120126 | US20110232501 | 20110914 |
| US2012024191 AA | 20120202 | US20110233088 | 20110915 |
| US2012028884 AA | 20120202 | US20110232659 | 20110914 |
| US2012028885 AA | 20120202 | US20110233195 | 20110915 |
| US2012028886 AA | 20120202 | US20110233223 | 20110915 |
| US2012097194 AA | 20120426 | US20110004279 | 20110111 |
| US2014083324 AA | 20140327 | US20130093347 | 20131129 |
| US2014196631 AA | 20140717 | US20140156007 | 20140115 |
| US2015191607 AA | 20150709 | US20130097128 | 20131204 |
| US7932230 BB    | 20110426 | US20090543199 | 20090818 |
| US7939500 BB    | 20110510 | US20090543145 | 20090818 |
| US8497248 BB    | 20130730 | US20110089479 | 20110419 |
| US8618066 BA    | 20131231 | US20070865514 | 20071001 |
| WO05007758 A2   | 20050127 | WO2004US21711 | 20040706 |
| WO05007758 A3   | 20050915 | WO2004US21711 | 20040706 |
| WO05007758 A8   | 20160317 | WO2004US21711 | 20040706 |
| WO11034931 A2   | 20110324 | WO2010US48946 | 20100915 |
| WO11034931 A3   | 20110811 | WO2010US48946 | 20100915 |

**Priority:**

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|----------------|----------|----------------|----------|----------------|----------|
| US20020409102P | 20020909 | US20030485234P | 20030703 | US20030655345  | 20030904 |
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**Probable Assignee:** REACTIVE SURFACES LTD LLP

**Assignee(s):** (std): MCDANIEL C ; MCDANIEL C STEVEN ; MCDANIEL STEVEN C ; REACTIVE SURFACES LTD ; REACTIVE SURFACES LTD LLP ; STEVEN MCDANIEL C ; REACTIVE SURFACE LTD ; RAWLINS JAMES W ; WALES MELINDA ; WILLIAMS ERIC B

**Assignee(s):** STEVEN C MCDANIEL ; C MCDANIEL ; C STEVEN MCDANIEL

**Inventor(s):** (std): WALES MELINDA ; WILLIAMS ERIC B ; WILLIAMS ERIC ; WALES MELINDA E ; RAWLINS JAMES ; CIPI PIRRO ; CARVAJAL JUAN CARLO ; MCDANIEL C STEVEN ; BRAASCH DWAINNE ; MCDANIEL C S ; MCDANIEL STEVEN C ; RAWLINS JAMES W

**Inventor(s):** STEVEN MCDANIEL ; MCDANIEL C ; C STEVEN MCDANIEL

**Agent(s):** WRAYS; MARCHANT MICHAEL JOHN; ELLA CHEONG HONG KONG LTD; DEACONS; SANFORD TCOLB AND CO; C STEVEN MCDANIEL MCDANIEL AND ASSOCIATES PC; DAFFER MCDANIEL LLP; C STEVEN MCDANIEL C O DAFFER MCDANIEL LLP; RISSMAN HENDRICKS AND OLIVERIO LLP; NOVAK DRUCE CONNOLLY BOVE AND QUIGG LLP; MCDANIEL AND ASSOCIATES PC; MCDANIEL C STEVEN

**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 TH TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

**Title:** ADDITIVE COMPOSITION FOR **MORTARS**, CEMENTS AND **JOINT** COMPOUNDS AND CEMENTITIOUS COMPOSITIONS MADE THEREFROM

**Abstract:** An additive composition for **mortars**, exterior insulation finish systems, self-leveling compounds and **joint** compounds is disclosed. The additive composition contains a nitrogen-containing polymer and a reactive agent capable of forming a crosslinking reaction with the nitrogen-containing polymer. Small amounts of the additive composition contained in a product cannot only increase one or more properties of the product but can also minimize the use of redispersible polymers in the product.

**Classifications:**

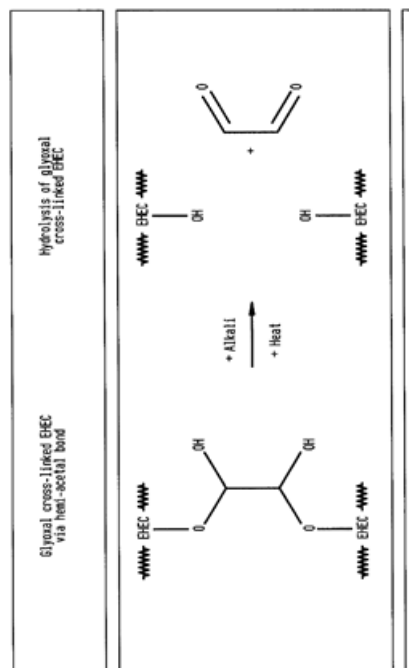
**International (IPC 8-9):** C04B20/10 C04B24/26 C04B24/28 C04B28/00 C04B28/02 C04B28/04 C04B28/06 C04B28/14 C04B40/00 C04B7/00 C04B7/02 C04B9/12 C08F126/02 C08F8/28 C08L1/02 C08L29/06 C08L31/04 C08L39/02 C08L39/04 C08L61/00 C08L73/02 C08L79/00 (Advanced/Invention); C04B111/00 C04B111/62 C04B111/70 C04B111/72 (Advanced/Non-invention); C04B20/00 C04B24/00 C04B28/00 C04B40/00 C08F126/00 C08F8/00 C08L61/00 (Core/Invention)

**CPC:** C04B24/2623 C04B7/32 C04B24/383 C04B14/28 C04B24/2652 C04B24/287 C04B2103/54 C04B2103/65 C04B24/04 C04B22/0013 C04B22/10 C04B24/2641 C04B14/06 C04B24/008 C04B24/26 C04B7/02 C04B20/0048 C04B24/2664 C04B24/281 C04B28/02 C04B20/1011 C04B28/06 C04B28/14 C04B40/0042 C04B2111/00508 C04B2111/00517 C04B2111/00672 C04B2111/62 C04B2111/70 C04B2111/72

**European:** C04B20/10A4 C04B28/02 C04B28/06 C04B28/14 C04B40/00D4B M04B111/00T10B M04B111/00T2D M04B111/00T2F M04B111/62 M04B111/70 M04B111/72

**US:** 106/713 524/2 524/2S 524/4 524/4P 524/4S 524/5 524/5P 524/6 524/6S0 525/154 525/154S 525/157 525/186 525/205 525/207 525/217 525/218 525/328.2 525/328.200S 525/417 525/54.23 525/55 525/56 525/57 525/61 525/61S

PatBase - US8882907\_BB



**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| US2009186963 AA    | 20090723         | US20080313977      | 20081126         |
| US2009318589 AA    | 20091224         | US20090455221      | 20090529         |
| US2013053475 AA    | 20130228         | US20120661333      | 20121026         |
| US8323400 BB       | 20121204         | US20080313977      | 20081126         |
| US8828137 BB       | 20140909         | US20120661333      | 20121026         |
| US8882907 BB       | 20141111         | US20090455221      | 20090529         |
| WO09073140 A1      | 20090611         | WO2008US13177      | 20081126         |

**Priority:**

US20070991492P 20071130 US20080313977 20081126 US20090455221 20090529  
US20120661333 20121026

**Probable Assignee:** SEKISUI SPECIALTY CHEMICALS AMERICA LLC

**Assignee(s):** (std): CELANESE INT CORP ; CUPTA MARK G ; ROMERO NOCHEBUENA EDUARDO ; BRIONES JOSE A ; BRONDSEMA PHILIP J

**Assignee(s):** CELANESE INT ; SEKISUI SPECIALTY CHEMICALS AMERICA LLC

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**Agent(s):** FERRELLS PLLC; MICHAEL W; ANNA L; FERRELL MICHAEL W

**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 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 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 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

**Title:** COATINGS AND SURFACE TREATMENTS HAVING ACTIVE ENZYMES AND PEPTIDES

**Abstract:** Disclosed herein are a materials such as a coating, an elastomer, an adhesive, a sealant, a textile finish, a wax, and a filler for such a material, wherein the material includes an enzyme such as an esterase (e.g., a lipolytic enzyme, a sulfuric ester hydrolase, an organophosphorus compound degradation enzyme), an enzyme that degrades a cell wall and/or a cell membrane component (e.g., a lysozyme, a lytic transglycosylase, a peptidase), and/or a biocidal or biostatic peptide. Also disclosed herein are methods of decontaminating a surface comprising such a material from a chemical substrate of an enzyme such as a lipid or an organophosphorus compound, as well as reducing the growth of a microorganism on or within such a material.

**Classifications:**

**International (IPC 8-9):** C09D5/00 C09D7/12 C12N9/00 (Advanced/Invention);

C09D5/00 C09D7/12 C12N9/00 (Core/Invention)

**CPC:** C09D7/63 C12N9/16 A01N63/02 C09D5/1687 C12N9/20 C12N9/48 C12N9/80 C12N11/04

**European:** A01N63/02 C09D5/16N C09D7/12D4 C12N11/04 C12N9/16 C12N9/20 C12N9/48 C12N9/80

**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| EP2324087 A2       | 20110525         | EP20090767426      | 20090529         |
| EP2324087 A4       | 20120530         | EP20090767426      | 20090529         |
| WO09155115 A2      | 20091223         | WO2009US45692      | 20090529         |
| WO09155115 A3      | 20100318         | WO2009US45692      | 20090529         |

**Priority:**

US20080057705 20080530      US20080057705P 20080530      US20080058025P 20080602  
US20080058025 20080602      WO2009US45692 20090529

**Probable Assignee:** REACTIVE SURFACES LTD

**Assignee(s):** (std): MCDANIEL STEVEN C ; REACTIVE SURFACES LTD

**Inventor(s):** (std): MCDANIEL STEVEN ; MCDANIEL STEVEN C

**Agent(s):** MURGITROYD GEORGE EDWARD; MCDANIEL STEVEN C

**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 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 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

**Title:** DRY **MORTAR** AND EMULSION/DISPERSION BASED COMPOSITIONS

**Abstract:** The presently disclosed and claimed inventive concept(s) related to a dry **mortar** composition or an emulsion/dispersion based composition having hydrophobically modified polymer compositions. The dry **mortar** composition or an emulsion/dispersion based composition comprises one or more polymer emulsions and/or redispersible powders, and one or more hydrophobic, and water-resistant or water-repellent additive. The emulsion/dispersion based composition can be used as a grout, a **joint** filler, a mastic, a pasty, textured plaster, tile adhesive, structure-latex based render, silicate render, fine dispersion render for skim coat, dispersion based tile grout, acrylate based render, latex-based primer, and colorized latex-based renders.

**Classifications:**

**International (IPC 8-9):** C04B111/27 C04B14/06 C04B14/28 C04B24/04 C04B24/10 C04B24/26 C04B24/28

C04B28/04 (Advanced/Invention);

C04B111/27 (Advanced/Non-invention)

**CPC:** C04B28/04 C04B24/045 C04B24/04 C04B24/36 C04B2103/65 C04B2111/00672 C09J131/04

**US:** 523/122 524/3 524/4 524/5 524/8

**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| ■ US2015119490 AA  | 20150430         | US20140521942      | 20141023         |
| ■ WO15065841 A1    | 20150507         | WO2014US62159      | 20141024         |

**Priority:**

US20130897876P 20131031 US20140521942 20141023

**Probable Assignee:** HERCULES INC

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**Inventor(s):** (std): KRISHNAN VENKATARAM ; RENNERT BRIGITTE ; VENKATARAM KRISHNAN

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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 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 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