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(54) Title: IONIC ORGANOSILICON COMPOUNDS AND COMPOSITIONS THEREOF

(57) Abstract: Ionic organosilicon compounds are provided comprising aqueous compositions comprising such ionic organosilicon compounds; wherein the aqueous compositions are suitable for imparting water repellency to a wide variety of surfaces. The compositions of the present invention are prepared by dissolving ionic organosilicon compounds in water. Surprisingly, it has been found that the water soluble ionic organosilicon compounds, which have an ionic group, a hydrophobic group and at least one alkoxy group on silicon, of the present invention provide treated surfaces with excellent hydrophobicity.



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INTERNATIONAL SEARCH REPORT

International application No.
PCT/IN 06/00305

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - C07F 7/04 (2008.04)
USPC - 556/413
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC(8) - C07F 7/04 (2008.04)
USPC - 556/413

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
IPC(8) - C07F 7/04 (2008.04)
USPC - 556/413 (text search)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PubWEST(USPT,PGPB,EPAB,JPAB); Google
Search Terms Used: organosilicon, 3-[tri(2-ethoxyethoxy)silyl]propylmethyldidecyl ammonium chloride, hydroxyethoxy silyl ammonium chloride, water repellent

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| Y | US 5,421,866 A (STARK-KASLEY et al.) 06 June 1995 (06.06.1995), col 1-3 | 1-16 |
| Y | US 4,404,348 A (FAU et al.) 13 September 1983 (13.09.1983), col 7 | 1-16 |
| Y | US 5,209,775 A (BANK et al.) 11 May 1993 (11.05.1993), col 2, ln 13-40 | 2, 5-9, 13-15 |
| Y | US 2004/0106694 A1 (FUJISAWA et al.) 03 June 2004 (03.06.2004), para [0025] | 7, 9, 13, 15 |

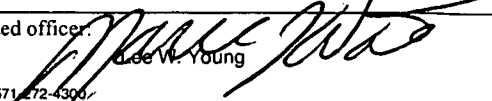
Further documents are listed in the continuation of Box C.

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