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(54) Title: MICROENCAPSULATION OF ORGANIC SILANES AND THEIR USE AS SELF HEALING MATERIALS

(57) Abstract: The disclosure provides a poly(urea-formaldehyde) microcapsule, which comprises encapsulated in the poly(urea-formaldehyde) microcapsule an organofluorine silane of the general formula (I) $A_3C(CA_2)_mSiR^1X_{(3-y)}$ (I), wherein in formula (I) A is either fluorine (F) or hydrogen (H), wherein at least 50 % of atoms A are fluorine, X is chloro or a group RO, wherein R is a linear or branched alkyl radical of 1 to 4 carbon atoms, R^1 is a linear, branched or cyclic alkyl group of 1 to 8 carbon atoms, $n = 0$ or 2, $y = 0$ or 1 or 2 and $m = 0$ to 20, encapsulated within the microcapsule. The disclosure also provides self-healing coating compositions comprising such polymeric microcapsules and methods of preventing or slowing corrosion using such coating compositions.

