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(54) Title: FLUOROSULFONIC ACID ORGANIC POLYMERS

(57) Abstract: The present invention provides for a composition and a process for forming the composition. The composition comprises an organic polymer and 0.5-40 % by weight of the composition of a siloxane, the organic polymer having a fluorinated backbone and 3-20 mol-% of pendant groups represented by the formula (I): $-O_p-[CF(R_f^1)CF-O_m]_n-CF_2CF_2SO_3X$; wherein R_f is F or a perfluoroalkyl radical having 1-10 carbon atoms either unsubstituted or substituted by one or more ether oxygen atoms, $m=0$ or 1, $n=0$ to 3, $p=0$ or 1, and X is H or an alkali metal; the siloxane comprising two or more groups which need not be the same represented by the formula (II): $-O_aSi(OH)_{b-a}R^1_{3-b}R^2R^fSO_3$; wherein $a=1$; 1 to b, $b=1$ to 3, R^1 is a non-hydrolyzable group independently selected from the group consisting of alkyl, cycloalkyl, aryl and aralkyl, X is an alkali metal or hydrogen, R^2 is a bidentate alkylene radical either unsubstituted or substituted by at least one ether oxygen atom with the proviso that R^2 has at least two carbon atoms linearly disposed between Si and R_f^2 , and R_f^2 is a perfluoroalkylene ether radical either unsubstituted or substituted by at least one ether oxygen atom.



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