

represents an integer of 0 to 3; f represents an integer of 1 to 20; and R^{7t} represents a substituent,

[0367] As the substituent for R^{7t} , the same groups as those which the aforementioned aliphatic hydrocarbon group or aromatic hydrocarbon group for R^x may have as a substituent can be used.

[0368] If there are two or more of the R^{7t} group, as indicated by the value r1, then the two or more of the R^{7t} groups may be the same or different from each other.

[0369] t is preferably 1 or 2.

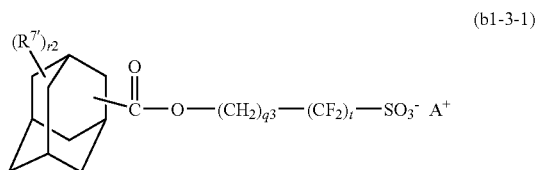
[0370] v0 is preferably 0 to 2, more preferably 0 or 1, and still more preferably 0.

[0371] It is preferable that each of q1 and q2 independently represent 1 to 5, and more preferably 1 to 3.

[0372] r1 is preferably an integer of 0 to 2, and more preferably 0 or 1.

[0373] f is preferably 1 to 15, and more preferably 1 to 10.

[Chemical Formula 50]



In the formula, A^+ is the same as defined above; t represents an integer of 1 to 3; q3 represents an integer of 1 to 12; r2 represents an integer of 0 to 3; and R^{7t} represents a substituent.

[0374] The substituent for R^{7t} is the same as defined above.

[0375] If there are two or more of the R^{7t} group, as indicated by the value r2, then the two or more of the R^{7t} groups may be the same or different from each other.

[0376] t is preferably 1 or 2.

[0377] q3 is preferably 1 to 5, and more preferably 1 to 3.

[0378] r2 is preferably an integer of 0 to 2, and more preferably 0 or 1.

[0379] As the component (B1), one type of acid generator may be used alone, or two or more types may be used in combination.

[0380] In the resist composition of the present invention, the amount of the component (B1) within the component (B) is preferably 50% by weight or more, more preferably 60% by weight or more, still more preferably 75% by weight or more, and most preferably 100% by weight. When the amount of the component (B1) is at least as large as the lower limit of the above-mentioned range, the effects of the present invention can be improved.

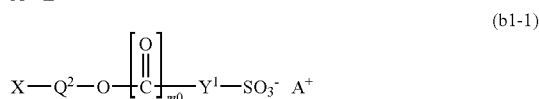
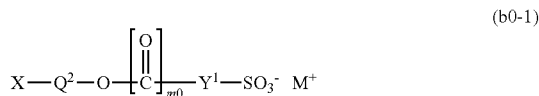
[0381] The component (B1) can be produced by a conventional method.

[0382] As the component (B1), for example, a compound represented by the aforementioned general formula (b1-1) and a compound represented by the aforementioned general formula (b1-2) can be produced as follows.

[0383] [Production Method of Compound Represented by General Formula (b1-1)]

[0384] A compound represented by general formula (b1-1) above can be produced by a method including reacting a compound (b0-1) represented by general formula (b0-1) shown below with a compound (b0-2) represented by general formula (b0-2) shown below.

[Chemical Formula 51]



[0385] In general formulas (b0-1) and (b0-2), X , Q^2 , $m0$, Y^1 and A^+ are respectively the same as defined for X , Q^2 , $m0$, Y^1 and g in general formula (b1-1).

[0386] M^+ represents an alkali metal ion. Examples of alkali metal ions include a sodium ion, a lithium ion and a potassium ion, and a sodium ion or a lithium ion is preferable.

[0387] Z^- represents a non-nucleophilic

[0388] Examples of non-nucleophilic ions include a halogen ion such as a bromine ion or a chlorine ion; an ion capable of forming an acid exhibiting a lower acidity than the compound (b0-1); BF_4^- , AsF_6^- , SbF_6^- , PF_6^- and ClO_4^- .

[0389] Examples of ions for which are capable of forming an acid exhibiting a lower acidity than the compound (b0-1) include sulfonic acid ions such as a p-toluenesulfonate ion, a methanesulfonate ion and a benzenesulfonate ion.

[0390] As the compound (b0-1) and the compound (b0-2), commercially available compounds may be used, or the compounds may be synthesized by a conventional method.

[0391] The method of producing the compound (b0-1) is not particularly limited. For example, a compound represented by general formula (b0-1-11) shown below can be dissolved in a solvent such as tetrahydrofuran or water, and the resulting solution can be subjected to a reaction in an aqueous solution of an alkali metal hydroxide such as sodium hydroxide or lithium hydroxide, thereby obtaining a compound represented by general formula (b0-1-12) shown below. Then, the compound represented by general formula (b0-1-12) can be subjected to a dehydration/condensation reaction with an alcohol represented by general formula (b0-1-13) shown below in an organic solvent such as benzene or dichloroethane in the presence of an acidic catalyst, thereby obtaining a compound represented by general formula (b0-1) above in which $m0$ is 1 (i.e., a compound represented by general formula (b0-1-1) shown below).

[Chemical Formula 52]

