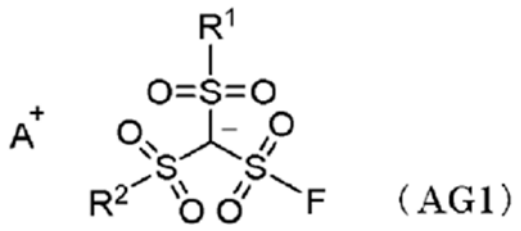
CLAIMS

[Claim 1]

A radiation-sensitive resin composition comprising:

an acid generator represented by General Formula (AG1), wherein

[chem. 1]



(AG1)

in General Formula (AG1),

R^1 and R^2 each independently represent a fluorine atom or -OR, where R is a monovalent organic group, and

A^+ is a counter cation.

[Claim 2]

The radiation-sensitive resin composition according to claim 1, further comprising:

a resin which is decomposed by an action of an acid to change solubility in a developer.

[Claim 3]

The radiation-sensitive resin composition according to claim 1, further comprising:

a component that increases in molecular weight due to an

action of an acid and changes solubility in a developer.

[Claim 4]

The radiation-sensitive resin composition according to any one of claims 1 to 3,

wherein R^1 and R^2 are both fluorine atoms.

[Claim 5]

The radiation-sensitive resin composition according to any one of claims 1 to 4,

wherein one of R^1 or R^2 is a fluorine atom and the other is -OR.

[Claim 6]

The radiation-sensitive resin composition according to any one of claims 1 to 5,

wherein at least one of R^1 or R^2 is -OR, and R includes a cyclic skeleton.

[Claim 7]

The radiation-sensitive resin composition according to any one of claims 1 to 6,

wherein A^+ is at least any cation selected from the group consisting of a sulfonium cation and an iodonium cation.

[Claim 8]

A pattern formation method comprising:

forming a film using the radiation-sensitive resin composition according to any one of claims 1 to 7;

irradiating the film with radiation; and

developing the film irradiated with the radiation.

[Claim 9]

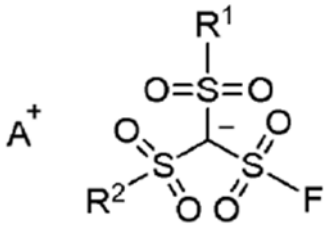
A method for manufacturing an electronic device, the method comprising:

the pattern formation method according to claim 8.

[Claim 10]

An acid generator represented by General Formula (AG1), wherein

[chem. 2]



(AG1)

in General Formula (AG1),

R^1 and R^2 each independently represent a fluorine atom or -OR, where R is a monovalent organic group, and

A^+ is a counter cation.

[Claim 11]

The acid generator according to claim 10,

wherein both R^1 and R^2 represent a fluorine atom.

[Claim 12]

The acid generator according to claim 10 or 11,

wherein one of R^1 or R^2 represents a fluorine atom and the other represents -OR.

[Claim 13]

The acid generator according to claim 10,

wherein at least one of R^1 or R^2 represents -OR, and R includes a cyclic skeleton.

[Claim 14]

The acid generator according to any one of claims 10 to 13,

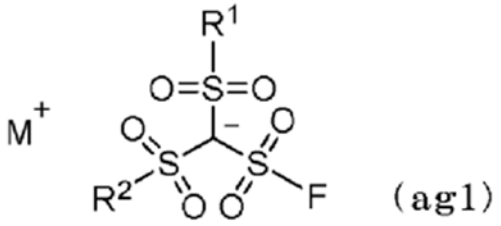
wherein A^+ represents at least any cation selected from the group consisting of a sulfonium cation and an iodonium cation.

[Claim 15]

A method for producing a compound, the method comprising:

reacting a compound represented by General Formula (ag1) with a compound represented by General Formula $A_1^+X^-$ (A_1^+ is a sulfonium cation or an iodonium cation, and X^- is a halide ion, a sulfonate ion, a sulfate ion, a phosphate ion, a hydroxide ion, or a carboxylate ion) to produce a compound represented by General Formula (AG1-1), wherein

[chem. 3]



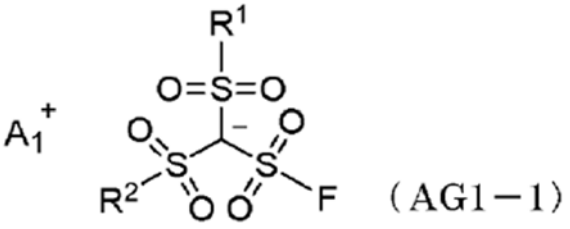
(ag1)

in General Formula (ag1),

M^+ is a metal cation,

R^1 and R^2 each independently represent a fluorine atom or -OR, where R is a monovalent organic group,

[chem. 4]



(AG1−1)

in General Formula (AG1-1),

a definition of A_1^+ is as described above,

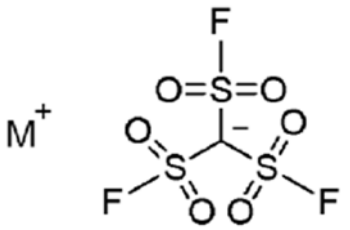
R^1 and R^2 each independently represent a fluorine atom or -OR, where R is a monovalent organic group.

[Claim 16]

A method for producing a compound, the method comprising:

reacting a compound represented by General Formula (M-FSM) with a compound represented by R-OH, where R is a monovalent organic group, to obtain a compound represented by General Formula (ag1), wherein

[chem. 5]

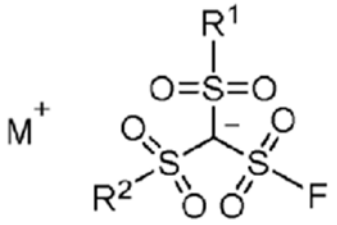


(M−FSM)

in General Formula (M-FSM),

M^+ is a metal cation,

[chem. 6]



(ag1)

in General Formula (ag1),

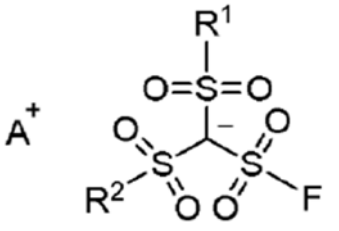
M^+ is a metal cation,

R^1 and R^2 each independently represent a fluorine atom or -OR, where at least one of R^1 or R^2 is -OR, and R is a monovalent organic group.

[Claim 17]

A compound represented by General Formula (AG1), wherein

[chem. 7]



(AG1)

in General Formula (AG1),

R^1 and R^2 each independently represent a fluorine atom or -OR, where R is a monovalent organic group, and

A^+ is a counter cation.

[Claim 18]

The compound according to claim 17,

wherein both R^1 and R^2 represent a fluorine atom.

[Claim 19]

The compound according to claim 17 or 18,

wherein one of R^1 or R^2 represents a fluorine atom, and the other represents -OR.

[Claim 20]

The compound according to claim 17,

wherein at least one of R^1 or R^2 represents -OR, and R includes a cyclic skeleton.

[Claim 21]

The compound according to any one of claims 17 to 20,

wherein A^+ represents at least any cation selected from the group consisting of a sulfonium cation and an iodonium cation.

[Claim 22]

A method for generating an acid, the method comprising:

irradiating the compound according to claim 17 or 18 with radiation to generate an acid.