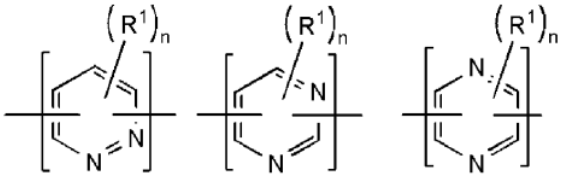
## CLAIMS

1. A polymer comprising:

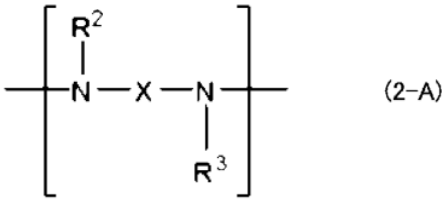
a first structural unit represented by at least one of formulae (1-1), (1-2) and (1-3) below; and a second structural unit represented by formula (2-A) below;

the first structural unit represented by at least one of formulae (1-1), (1-2) and (1-3) are jointed together via N in the second structural unit;



(1-1) (1-2) (1-3)

in formulae (1-1) to (1-3), $R^1$ is each independently a halogen atom, a monovalent hydrocarbon group having 1 to 20 carbon atoms, a monovalent halogenated hydrocarbon group having 1 to 20 carbon atoms, a nitro group, a cyano group, any of primary to tertiary amino groups or a salt of any of primary to tertiary amino groups; n is each independently an integer of 0 to 2; and when n is 2, two or more $R^1$ may be the same or different and may be joined together in any combination to form a part of a cyclic structure,

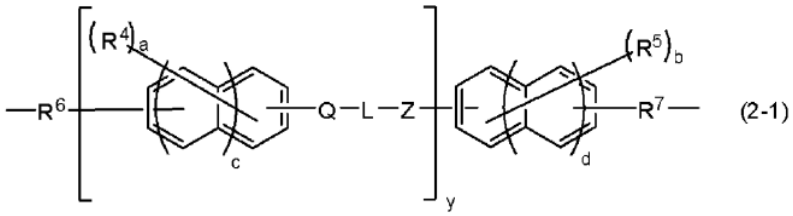


(2-A)

in formula (2-A), $R^2$ and $R^3$ are respectively and independently a hydrogen atom or a monovalent hydrocarbon group having 1 to 20 carbon atoms; and X is a bivalent organic group.

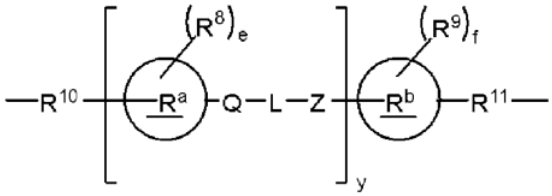
2. The polymer according to claim 1, wherein X in formula (2-A) is a group represented by formulae (2-1) to (2-8) below, a bivalent hydrocarbon group having 1 to

20 carbon atoms, a bivalent halogenated hydrocarbon group having 1 to 20 carbon atoms or a 3- to 10-membered bivalent heterocyclic group



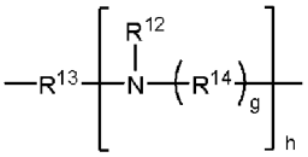
(2-1)

in formula (2-1), $R^4$ and $R^5$ are respectively and independently a halogen atom, a monovalent hydrocarbon group having 1 to 20 carbon atoms, a monovalent halogenated hydrocarbon group having 1 to 20 carbon atoms, an alkoxy group having 1 to 20 carbon atoms, an alkylthio group having 1 to 20 carbon atoms, a nitro group, a cyano group, a carboxy group, a sulfonic acid group, a phosphonic acid group, a phosphoric acid group, a hydroxy group, any of primary to tertiary amino groups, a salt of carboxy group, a salt of sulfo group, a salt of phosphonic acid group, a salt of phosphate group, a salt of hydroxy group or a salt of any of primary to tertiary amino groups; c and d are respectively and independently an integer of 0 to 2; a and b are respectively and independently an integer of 0 to 8; when a is 2 or more, two or more $R^4$ may be the same or different and may be joined together in any combination to form a part of a cyclic structure; when b is 2 or more, two or more $R^5$ may be the same or different and may be joined together in any combination to form a part of a cyclic structure; Q and Z are respectively and independently a single bond, -O-, -S- or -N($R^{17}$)-; $R^{17}$ is a hydrogen atom, a monovalent hydrocarbon group having 1 to 20 carbon atoms or a monovalent halogenated hydrocarbon group having 1 to 20 carbon atoms; L is a single bond or a bivalent organic group; y is an integer of 0 to 5; when y is 2 or more, two or more Q, L and Z may be respectively the same or different.; when y is 2 or more and a is 1 or more, two or more $R^4$ may be the same or different; $R^6$ and $R^7$ are respectively and independently a single bond, a methylene group or an alkylene group having 2 to 4 carbon atoms;



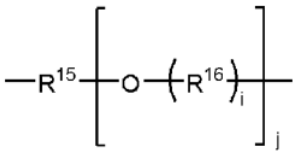
(2-2)

in formula (2-2), $R^a$ and $R^b$ are respectively and independently a 5- to 30-membered bivalent alicyclic hydrocarbon skeleton; $R^8$ and $R^9$ are respectively and independently a halogen atom, a monovalent hydrocarbon group having 1 to 20 carbon atoms, a monovalent halogenated hydrocarbon group having 1 to 20 carbon atoms, an alkoxy group having 1 to 20 carbon atoms, an alkylthio group having 1 to 20 carbon atoms, a nitro group, a cyano group, a carboxy group, a sulfonic acid group, a phosphonic acid group, a phosphoric acid group, a hydroxy group, any of primary to tertiary amino groups, a salt of carboxy group, a salt of sulfo group, a salt of phosphonic acid group, a salt of phosphate group, a salt of hydroxy group or a salt of any of primary to tertiary amino groups; e and f are respectively and independently an integer of 0 to 20; when e is 2 or more, two or more $R^8$ may be the same or different and may be joined together in any combination to form a part of a cyclic structure; when f is 2 or more, two or more $R^9$ may be the same or different and may be joined together in any combination to form a part of a cyclic structure; Q and Z are respectively and independently a single bond, -O-, -S- or -N($R^{18}$)-; $R^{18}$ is a hydrogen atom, a monovalent hydrocarbon group having 1 to 20 carbon atoms or a monovalent halogenated hydrocarbon group having 1 to 20 carbon atoms; L is a single bond or a bivalent organic group; y is an integer of 0 to 5; when y is 2 or more, two or more Q, L and Z may be respectively the same or different; when y is 2 or more and e is 1 or more, two or more $R^8$ may be the same or different; $R^{10}$ and $R^{11}$ are respectively and independently a single bond, a methylene group or an alkylene group having 2 to 4 carbon atoms;



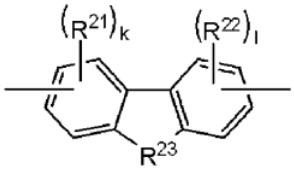
(2-3)

in formula (2-3), $R^{12}$ is a hydrogen atom, a monovalent hydrocarbon group having 1 to 20 carbon atoms or a monovalent halogenated hydrocarbon group having 1 to 20 carbon atoms; $R^{13}$ and $R^{14}$ are respectively and independently a bivalent linear or alicyclic hydrocarbon group having 1 to 20 carbon atoms or a bivalent linear or alicyclic halogenated hydrocarbon group having 1 to 20 carbon atoms; g is 0 or 1; h is an integer of 1 to 10; and when h is 2 or more, two or more $R^{12}$ and $R^{14}$ may be respectively the same or different;



(2-4)

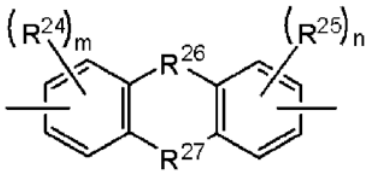
in formula (2-4), $R^{15}$ and $R^{16}$ are respectively and independently a bivalent linear or alicyclic hydrocarbon group having 1 to 20 carbon atoms or a bivalent linear or alicyclic halogenated hydrocarbon group having 1 to 20 carbon atoms; i is 0 or 1; j is an integer of 1 to 10; and when j is 2 or more, two or more $R^{16}$ may be the same or different;



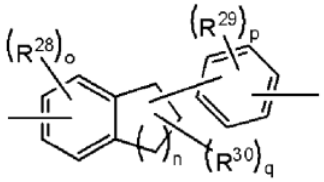
(2-5)

in formula (2-5), $R^{21}$ and $R^{22}$ are respectively and independently a halogen atom, a monovalent hydrocarbon group having 1 to 20 carbon atoms, a monovalent halogenated hydrocarbon group having 1 to 20 carbon atoms, an alkoxy group having 1 to 20 carbon atoms, an alkylthio group having 1 to 20 carbon atoms, a nitro group, a cyano group, a carboxy group, a sulfonic acid group, a phosphonic acid group, a

phosphoric acid group, a hydroxy group, any of primary to tertiary amino groups, a salt of carboxy group, a salt of sulfo group, a salt of phosphonic acid group, a salt of phosphate group, a salt of hydroxy group or a salt of any of primary to tertiary amino groups; k and l are respectively and independently an integer of 0 to 3; when k is 2 or 3, two or more $R^{21}$ may be the same or different; when l is 2 or 3, two or more $R^{22}$ may be the same or different; $R^{23}$ is a single bond, -O-, -S-, -C(O)-, -S(O)- or $-S(O)_2-$;

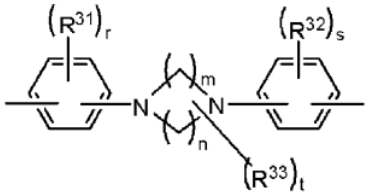

(2-6)

in formula (2-6), $R^{24}$ and $R^{25}$ are respectively and independently a halogen atom, a monovalent hydrocarbon group having 1 to 20 carbon atoms, a monovalent halogenated hydrocarbon group having 1 to 20 carbon atoms, an alkoxy group having 1 to 20 carbon atoms, an alkylthio group having 1 to 20 carbon atoms, a nitro group, a cyano group, a carboxy group, a sulfonic acid group, a phosphonic acid group, a phosphoric acid group, a hydroxy group, any of primary to tertiary amino groups, a salt of carboxy group, a salt of sulfo group, a salt of phosphonic acid group, a salt of phosphate group, a salt of hydroxy group or a salt of any of primary to tertiary amino groups; m and n are respectively and independently an integer of 0 to 3; when m is 2 or 3, two or more $R^{24}$ may be the same or different; when n is 2 or more, two or more $R^{25}$ may be the same or different; $R^{26}$ and $R^{27}$ are respectively and independently a single bond, -O-, -S-, -C(O)-, -S(O)- or $-S(O)_2-$;


(2-7)

in formula (2-7), $R^{28}$ and $R^{29}$ are respectively and independently a halogen atom,

a monovalent hydrocarbon group having 1 to 20 carbon atoms, a monovalent halogenated hydrocarbon group having 1 to 20 carbon atoms, an alkoxy group having 1 to 20 carbon atoms, an alkylthio group having 1 to 20 carbon atoms, a nitro group, a cyano group, a carboxy group, a sulfonic acid group, a phosphonic acid group, a phosphoric acid group, a hydroxy group, any of primary to tertiary amino groups, a salt of carboxy group, a salt of sulfo group, a salt of phosphonic acid group, a salt of phosphate group, a salt of hydroxy group or a salt of any of primary to tertiary amino groups; o is an integer of 0 to 3; p is an integer of 0 to 4; when o is 2 or more, two or more $R^{28}$ may be the same or different; when p is 2 or more, two or more $R^{29}$ may be the same or different; n is an integer of 0 to 6; $R^{30}$ is a monovalent hydrocarbon group having 1 to 20 carbon atoms or a monovalent halogenated hydrocarbon group having 1 to 20 carbon atoms; q is an integer of 0 to 15; when q is 2 or more, two or more $R^{30}$ may be the same or different; and



(2-8)

in formula (2-8), $R^{31}$ and $R^{32}$ are respectively and independently a halogen atom, a monovalent hydrocarbon group having 1 to 20 carbon atoms, a monovalent halogenated hydrocarbon group having 1 to 20 carbon atoms, an alkoxy group having 1 to 20 carbon atoms, an alkylthio group having 1 to 20 carbon atoms, a nitro group, a cyano group, a carboxy group, a sulfonic acid group, a phosphonic acid group, a phosphoric acid group, a hydroxy group, any of primary to tertiary amino groups, a salt of carboxy group, a salt of sulfo group, a salt of phosphonic acid group, a salt of phosphate group, a salt of hydroxy group or a salt of any of primary to tertiary amino groups; r and s are respectively and independently an integer of 0 to 4; when r is 2 or more, two or more $R^{31}$ may be the same or different; when s is 2 or more, two or more

$R^{32}$ may be the same or different; m is an integer of 1 to 5; n is an integer of 0 to 5; $R^{33}$ is a monovalent hydrocarbon group having 1 to 20 carbon atoms or a monovalent halogenated hydrocarbon group having 1 to 20 carbon atoms; t is an integer of 0 to 20; when t is 2 or more, two or more $R^{33}$ may be the same or different.

3. The polymer according to claim 2, wherein X in the formula (2-A) is a group represented by formulae (2-1) to (2-4), a bivalent hydrocarbon group having 1 to 20 carbon atoms, a bivalent halogenated hydrocarbon group having 1 to 20 carbon atoms or a 3- to 10-membered bivalent heterocyclic group.

4. The polymer according to any one of claims 1 to 3, wherein a weight average molecular weight based on polystyrene is 500 to 600,000 inclusive.

5. A composition comprising the polymer according to any one of claims 1 to 4 and an organic solvent.

6. A molded article comprising the polymer according to any one of claims 1 to 4.