Claims

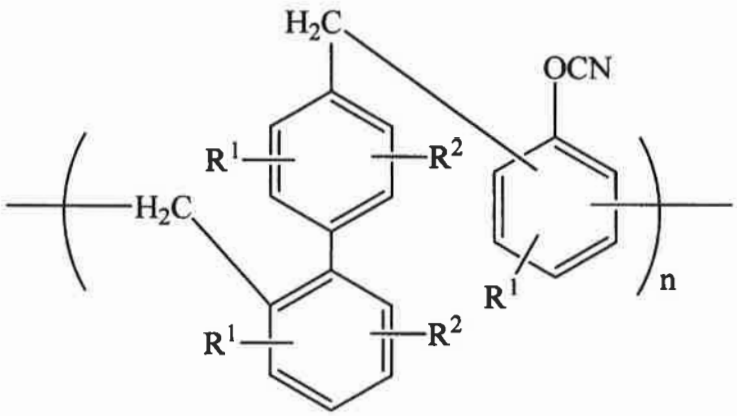
[Claim 1]

A resin composition comprising:

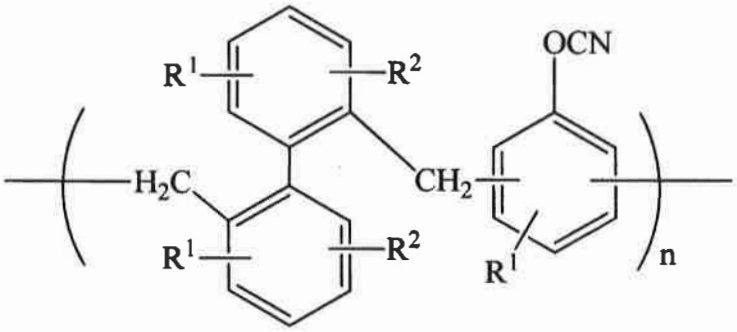
a mixture (A) of at least two cyanate ester compounds selected from the group consisting of a cyanate ester compound (A1) having a structural unit represented by the following general formula (1), a cyanate ester compound (A2) having a structural unit represented by the following general formula (2), and a cyanate ester compound (A3) having a structural unit represented by the following general formula (3);

an epoxy resin (B); and

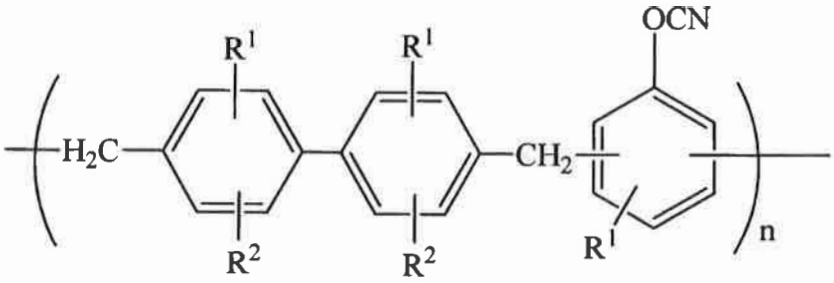
an inorganic filler (C):



(1)



(2)



(3)

wherein n is each independently an integer of 1 or more, and R^1 and R^2 are each independently a hydrogen atom, an alkyl group, or an aryl group~~.~~;

wherein a mixing ratio of the cyanate ester compound (A1) is 30 to 70 mol%, a mixing ratio of the cyanate ester compound (A2) is 15 to 45 mol%, and a mixing ratio of the cyanate ester compound (A3) is 5 to 35 mol%, based on 100 mol% of the total of the mixture (A) of the cyanate ester compounds.

~~[Claim 2]~~

~~The resin composition according to claim 1, wherein a mixing ratio of the cyanate ester compound (A1) is 30 to 70 mol%, a mixing ratio of the cyanate ester compound (A2) is 15 to 45 mol%, and a mixing ratio of the cyanate ester compound (A3) is 5 to 35 mol%, based on 100 mol% of the total of the mixture (A) of the cyanate ester compounds.~~

[Claim ~~3~~2]

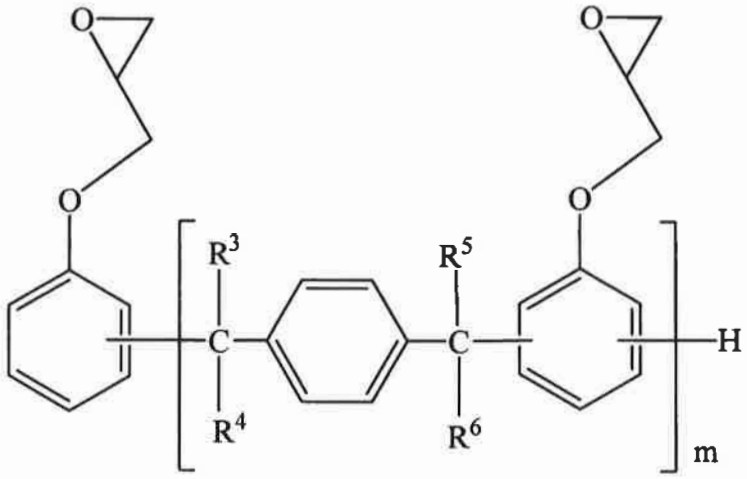
The resin composition according to claim 1~~ or 2~~, wherein n in the general formulae (1) to (3) is each independently an integer of 1 to 50.

[Claim ~~4~~3]

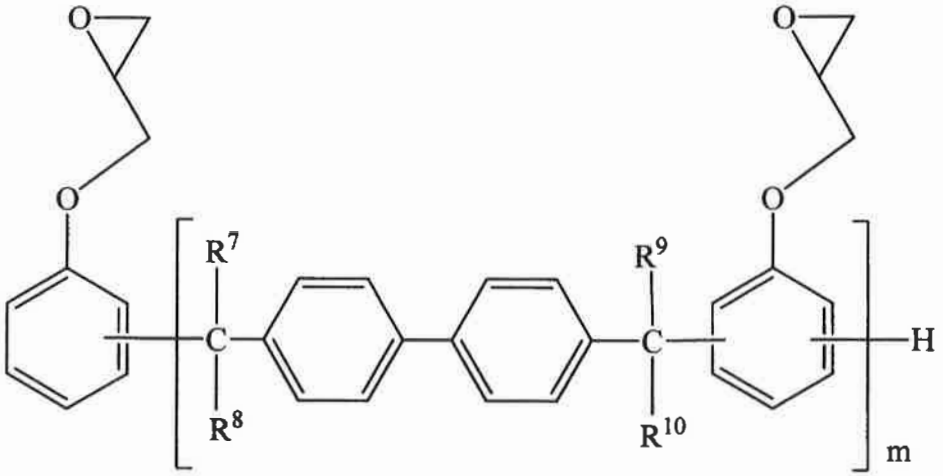
The resin composition according to ~~any one of~~ claim~~s~~ 1 or 2~~to 3~~, wherein the epoxy resin (B) is an aralkyl-based epoxy resin.

[Claim ~~5~~4]

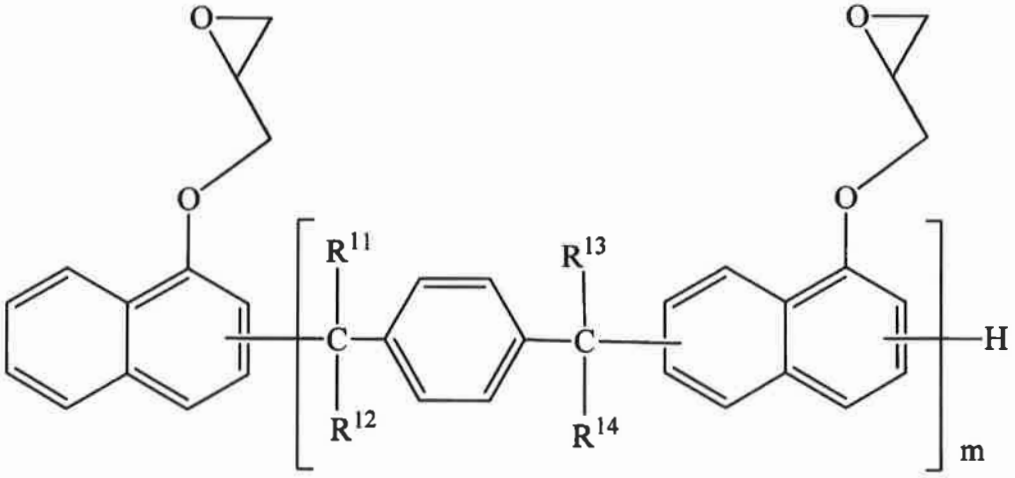
The resin composition according to claim ~~4~~3, wherein the aralkyl-based epoxy resin is at least one selected from the group consisting of a phenol phenyl aralkyl-based epoxy resin represented by the following general formula (4), a phenol biphenyl aralkyl-based epoxy resin represented by the following general formula (5), and a naphthol aralkyl-based epoxy resin represented by the following general formula (6):



(4)



(5)



(6)

wherein m is each independently an integer of 1 to 50; R^3 to R^{14} are each independently a hydrogen atom, a methyl group, an ethyl group, or an aryl group.

[Claim ~~6~~5]

The resin composition according to any one of claims 1 to ~~5~~4, wherein the inorganic filler (C) is silica.

[Claim ~~7~~6]

The resin composition according to any one of claims 1 to ~~6~~5, wherein a content of the mixture (A) of the

cyanate ester compounds is 10 to 90 parts by mass based on 100 parts by mass of the total of the mixture (A) of the cyanate ester compounds and the epoxy resin (B).

[Claim ~~8~~7]

The resin composition according to any one of claims 1 to ~~7~~6, wherein a content of the inorganic filler (C) is 10 to 1000 parts by mass based on 100 parts by mass of the total amount of the mixture (A) of the cyanate ester compounds and the epoxy resin (B).

[Claim ~~9~~8]

A prepreg obtained by impregnating a base material with the resin composition according to any one of claims 1 to ~~8~~7 or applying the resin composition to a base material.

[Claim ~~10~~9]

A metal foil-clad laminate comprising the prepreg according to claim ~~9~~8.

[Claim ~~11~~10]

A printed wiring board comprising an insulating layer, and a conductor layer formed on a surface of the insulating layer, wherein the insulating layer comprises the resin composition according to any one of claims 1 to ~~8~~7.