parts by mass), and satisfying the following requirements (a) and (b):

a requirement (a); having a tan δ peak temperature of 0°C or higher and 60°C or lower, the tan δ peak temperature being obtained by performing dynamic viscoelastic measurement at a frequency of 10 rad/s (1.6 Hz) in the temperature range of -40 to 150°C, and

a requirement (b); having a tan δ peak value of 0.8 or more and 5.0 or less, the tan δ peak value being obtained by performing dynamic viscoelastic measurement at a frequency of 10 rad/s (1.6 Hz) in the temperature range of -40 to 150°C. [0006b]

In another aspect of the present disclosure, there is provided a resin composition (X) comprising:

10 to 50 parts by mass of a thermoplastic resin (A); and

50 to 90 parts by mass of an inorganic substance (B) (assuming that the total amount of the thermoplastic resin (A) and the inorganic substance (B) is 100 parts by mass), and satisfying the following requirements (a) and (b):

a requirement (a); having a tan δ peak temperature of 0°C or higher and 60°C or lower, the tan δ peak temperature being obtained by performing dynamic viscoelastic measurement at a frequency of 10 rad/s (1.6 Hz) in the temperature range of -40 to 150°C; and

parts by mass),

wherein the resin composition (X) satisfies the following requirements (a) and (b),

wherein the 4-methyl-1-pentene·α-olefin copolymer (A-1) satisfies the following requirements (c) to (f), and

wherein the inorganic substance (B) is one or more selected from the group consisting of barium sulfate and calcium carbonate:

a requirement (a); having a tan δ peak temperature of 0°C or higher and 60°C or lower, the tan δ peak temperature being obtained by performing dynamic viscoelastic measurement at a frequency of 10 rad/s (1.6 Hz) in the temperature range of -40 to 150°C;

a requirement (b); having a tan δ peak value of 0.8 or more and 5.0 or less, the tan δ peak value being obtained by performing dynamic viscoelastic measurement at a frequency of 10 rad/s (1.6 Hz) in the temperature range of -40 to 150°C;

a requirement (c); the copolymer (A-1) comprises 55 to 90% by mol of a constitutional unit (i) derived from 4-methyl-1-pentene and 10 to 45% by mol of a constitutional unit (ii) derived from the α-olefin (excluding 4-methyl-1-pentene) assuming that the total amount of the constitutional unit (i) and the constitutional unit (ii) is 100% by mol;

a requirement (d); the copolymer (A-1) has a melting point (Tm) as measured by a differential scanning calorimeter (DSC) of 160°C or lower, or has no observed melting point (Tm);

a requirement (e); the copolymer (A-1) has a tan δ peak temperature of 15°C or higher and 45°C or lower, the tan δ peak temperature being obtained by performing dynamic viscoelastic measurement at a frequency of 10 rad/s (1.6 Hz) in the temperature range of -40 to 150°C; and

a requirement (f); the copolymer (A-1) has a tan δ peak value of 0.6 or more and 5.0 or less, the tan δ peak value being obtained by performing dynamic viscoelastic measurement at a frequency of 10 rad/s (1.6 Hz) in the temperature range of -40 to 150°C.

~~a requirement (b); having a tan δ peak value of 0.8 or more and 5.0 or less, the tan δ peak value being obtained by performing dynamic viscoelastic measurement at a frequency of 10 rad/s (1.6 Hz) in the temperature range of −40 to 150°C.~~

[0006~~b~~c]

In a further aspect of the present disclosure, there is provided a molded article comprising the resin composition disclosed herein.

[0006~~c~~d]

In another aspect of the present disclosure, there is provided a sheet comprising the resin composition disclosed herein.

[0006~~d~~e]

In a further aspect of the present disclosure, there is provided a toy comprising the resin composition disclosed herein.

[0006~~e~~f]

In another aspect of the present disclosure, there is provided a daily good comprising the resin composition disclosed herein.

[0006~~f~~g]

In a further aspect of the present disclosure, there is provided an electronic equipment housing comprising the resin composition disclosed herein.

Technical Problem

[0007]

The above-mentioned materials described in Patent Documents 1 and 2 have a high tan δ peak value at room temperature but may cause problems such as occurrence of stickiness on the surface of a molded article and deterioration in injection moldability due to the viscosity. Therefore, to avoid such problems, each of the materials described in Patent Documents 1 and 2 needs to be made into a

CLAIMS

1. A resin composition (X) comprising:

10 to 50 parts by mass of a 4-methyl-1-pentene·α-olefin copolymer (A-1); and

50 to 90 parts by mass of an inorganic substance (B)

(assuming that the total amount of the 4-methyl-1-pentene·α-olefin copolymer (A-1) and the inorganic substance (B) is 100 parts by mass),

wherein the resin composition (X) ~~and~~ satisfies~~ying~~ the following requirements (a) and (b),

wherein the 4-methyl-1-pentene·α-olefin copolymer (A-1) satisfies the following requirements (c) to (f), and

wherein the inorganic substance (B) is one or more selected from the group consisting of barium sulfate and calcium carbonate:

a requirement (a); having a tan δ peak temperature of 0°C or higher and 60°C or lower, the tan δ peak temperature being obtained by performing dynamic viscoelastic measurement at a frequency of 10 rad/s (1.6 Hz) in the temperature range of -40 to 150°C;~~, and~~

a requirement (b); having a tan δ peak value of 0.8 or more and 5.0 or less, the tan δ peak value being obtained by

performing dynamic viscoelastic measurement at a frequency of 10 rad/s (1.6 Hz) in the temperature range of -40 to 150°C;

a requirement (c); the copolymer (A-1) comprises 55 to 90% by mol of a constitutional unit (i) derived from 4-methyl-1-pentene and 10 to 45% by mol of a constitutional unit (ii) derived from the α-olefin (excluding 4-methyl-1-pentene) assuming that the total amount of the constitutional unit (i) and the constitutional unit (ii) is 100% by mol;

a requirement (d); the copolymer (A-1) has a melting point (Tm) as measured by a differential scanning calorimeter (DSC) of 160°C or lower, or has no observed melting point (Tm);

a requirement (e); the copolymer (A-1) has a tan δ peak temperature of 15°C or higher and 45°C or lower, the tan δ peak temperature being obtained by performing dynamic viscoelastic measurement at a frequency of 10 rad/s (1.6 Hz) in the temperature range of -40 to 150°C; and

a requirement (f); the copolymer (A-1) has a tan δ peak value of 0.6 or more and 5.0 or less, the tan δ peak value being obtained by performing dynamic viscoelastic measurement at a frequency of 10 rad/s (1.6 Hz) in the temperature range of -40 to 150°C.

~~2. A resin composition (X) comprising:~~

~~10 to 50 parts by mass of a thermoplastic resin (A); and~~

~~50 to 90 parts by mass of an inorganic substance (B)~~

~~(assuming that the total amount of the thermoplastic resin (A) and the inorganic substance (B) is 100 parts by mass),~~

~~and satisfying the following requirements (a) and (b):~~

~~a requirement (a); having a tan δ peak temperature of 0°C or higher and 60°C or lower, the tan δ peak temperature being obtained by performing dynamic viscoelastic measurement at a frequency of 10 rad/s (1.6 Hz) in the temperature range of −40 to 150°C; and~~

~~a requirement (b); having a tan δ peak value of 0.8 or more and 5.0 or less, the tan δ peak value being obtained by performing dynamic viscoelastic measurement at a frequency of 10 rad/s (1.6 Hz) in the temperature range of −40 to 150°C.~~

~~3. The resin composition (X) according to claim 1, wherein the 4-methyl-1-pentene·α-olefin copolymer (A-1) satisfies the following requirements (c) to (f):~~

~~a requirement (c); the copolymer (A-1) comprises 55 to 90% by mol of a constitutional unit (i) derived from 4-methyl-1-pentene and 10 to 45% by mol of a constitutional unit (ii) derived from the α-olefin (excluding 4-methyl-1-pentene) assuming that the total amount of the constitutional unit (i) and the constitutional unit (ii) is 100% by mol;~~

~~a requirement (d); the copolymer (A-1) has a melting point (Tm) as measured by a differential scanning calorimeter (DSC) of 160°C or lower, or has no observed melting point (Tm);~~

~~a requirement (e); the copolymer (A-1) has a tan δ peak temperature of 15°C or higher and 45°C or lower, the tan δ peak temperature being obtained by performing dynamic viscoelastic measurement at a frequency of 10 rad/s (1.6 Hz) in the temperature range of -40 to 150°C; and~~

~~a requirement (f); the copolymer (A-1) has a tan δ peak value of 0.6 or more and 5.0 or less, the tan δ peak value being obtained by performing dynamic viscoelastic measurement at a frequency of 10 rad/s (1.6 Hz) in the temperature range of -40 to 150°C.~~

~~4. The resin composition (X) according to any one of claims 1 to 3, wherein the inorganic substance (B) is one or more selected from the group consisting of magnesium sulfate, barium sulfate, calcium carbonate, magnesium oxide, and talc.~~

2~~5~~. The resin composition (X) according to claim 1~~ any one of claims 1 to 4~~, wherein the inorganic substance (B) has an average particle diameter of 0.01 μm to 100 μm.

36. A molded article comprising the resin composition according to any one of claims 1 to 25.

47. A sheet comprising the resin composition according to any one of claims 1 to 25.

58. A toy comprising the resin composition according to any one of claims 1 to 52.

69. A daily good comprising the resin composition according to any one of claims 1 to 25.

710. An electronic equipment housing comprising the resin composition according to any one of claims 1 to 25.

RESIN COMPOSITION AND MOLDED ARTICLE

ABSTRACT

An object of the present invention is to provide a resin composition and a molded article each having suppressed surface stickiness while having high stress-relaxing ability and vibration-absorbing ability at room temperature. A resin composition (X) containing 10 to 50 parts by mass of a thermoplastic resin (A) and 50 to 90 parts by mass of an inorganic substance (B), wherein a tan δ peak temperature and tan δ peak value, obtained by performing dynamic viscoelastic measurement at a frequency of 10 rad/s (1.6 Hz) in the temperature range of -40 to 150°C, are 0°C or higher and 60°C or lower, and 0.8 or more and 5.0 or less, respectively.

[No available figure]