

completely fixed to each other through sintering. Such a compound may have an unintentional adverse effect on the bonded structure to be obtained. For this reason, it is preferable that the temporary fixing composition is substantially free of an organic polymer compound. For a similar reason, it is also preferable that the temporary fixing composition is substantially free of an inorganic compound. The wording “substantially free of an organic polymer compound” means that an organic polymer compound is not intentionally contained in the temporary fixing composition, but inevitable contamination of the temporary fixing composition with an organic polymer compound is acceptable. The wording “substantially free of an inorganic compound” also has a similar meaning.

[0041]

Examples of the above-mentioned organic polymer compound include: polyolefins such as polyethylene, polypropylene, and ethylene- α -olefin copolymers; polyesters such as polyethylene terephthalate and polybutylene terephthalate; vinyl polymers such as polyvinyl chloride and polystyrene; (meth)acrylic acid-based polymers such as poly(meth)acrylic acid and polyalkyl (meth)acrylate; terpene-based polymers such as polyethylene glycol, terpene polymers, and terphenol polymers; and polycarbonate and polyether sulfone.

[0042]

Next, a method of using the temporary fixing composition of the present invention will be described.

Figs. 1(a) to 1(d) schematically illustrate a process of bonding a first bonding target material and a second bonding target material to each other using the temporary fixing composition. First, as illustrated in Fig. 1(a), a paste containing metal microparticles and an organic solvent is applied onto a substrate 10 to form a coating film thereon, the organic solvent is then removed from the coating film, and thus, a sintering precursor, which is a dried product of the paste, or in other words, a second bonding target material 11 is formed. Fig. 1(a) illustrates a state in which a single sintering precursor serving as the second bonding target material 11 is formed on the surface of a