The above-described copper particles may not be subjected to any special surface treatment. Alternatively, the copper particles constituting the copper powder may be coated or surface-treated with an organic or inorganic substance as long as the effects of the present invention can be exhibited.

[0036]

Next, a preferred method for producing the conductive composition will be described. The method involves uses of first copper particles, second copper particles, and a carboxylic acid, and includes the step of producing the first copper particles and the second copper particles separately, and the step of mixing the first copper particles, the second copper particles, and the carboxylic acid, as well as a dispersion medium and a sintering aid that may be used if necessary, simultaneously, or combining and mixing these components in any desired order. To mix the components, a known mixing apparatus such as a roll mill can be used.

[0037]

The method for producing the copper particles can be any of various methods such as a wet reduction method, an atomizing method, and an electrolytic reduction method. Spherical particles are likely to be obtained when a wet reduction method or an atomizing method is employed. Dendrite-shaped or column-shaped particles are likely to be obtained when an electrolytic reduction method is employed. Flake-shaped particles can be obtained by, for example, applying a mechanical external force to spherical particles to plastically deform the spherical particles.

[0038]

In view of achieving both of the ease of particle size control and the ease of obtaining spherical particles, each of the first copper particles and the second copper particles are preferably produced using a wet reduction method. Examples of the wet reduction method can be found in JP 2003-34802A, JP 2015-168878A, and JP 2017-179555A.

[0039]

The wet reduction method can be carried out in the following manner, for