

CARBON BLACK, METHOD FOR PRODUCING THE SAME, AND ITS USE

ABSTRACT

A carbon black having excellent conductivity-imparting ability, a method for producing the same, and a conductive composition containing the same are disclosed. The carbon black comprises a chain body comprising (1) chain parts of spherical carbon particles and (2) chain parts of rod-shaped carbon particles, the chain part (1) and the chain part (2) being connected, and is produced by supplying a raw material mixture comprising acetylene gas, hydrocarbon and a catalyst for carbon nanotube formation to a high temperature field having a temperature equal to or higher than a thermal decomposition temperature of the hydrocarbon, and heat treating the mixture, or by supplying hydrocarbon containing a catalyst for carbon nanotube formation, during pyrolysis of acetylene gas and/or in the state that acetylene gas has been pyrolyzed, and heat treating the resulting mixture at a temperature equal to or higher than a thermal decomposition temperature of the hydrocarbon.

Figure 1