

02 OCT 2002

SEMICONDUCTIVE CERAMIC COMPOSITION AND
SEMICONDUCTIVE CERAMIC ELEMENT USING THE SAME

ABSTRACT OF THE DISCLOSURE

A semiconductive ceramic composition having negative resistance-temperature characteristics, wherein the composition comprises lanthanum cobalt oxide as a primary component, and, as secondary components, at least one oxide of an element selected from Fe and Al and at least one oxide of an element selected from Si, Zr, Hf, Ta, Sn, Sb, W, Mo, Te, Ce, Nb, Mn, Th, and P. A semiconductive ceramic composition having a resistivity of approximately $10 \Omega \cdot \text{cm}$ to $100 \Omega \cdot \text{cm}$ at room temperature is obtained by controlling the amount of additives. Since the resistivity at room temperature can be enhanced to several times or more that of the conventional compositions while characteristics of the conventional compositions are maintained, the composition may be widely applied to control heavy current.

Fig. 1



162162



G00002