

ABSTRACT OF THE DISCLOSURE

A semiconducting ceramic compound has negative resistance-temperature characteristics with a critical temperature and consists essentially of a rare-earth transition element oxide which is an oxide of a combination of Ln and nickel (LnNi), wherein Ln is an element selected from a group including bismuth and rare-earth elements but excluding lanthanum and cerium. The resistivity of this semiconducting ceramic compound sharply drops beyond a specific critical temperature and such critical temperature can be freely set to a desired level.

