

NICKEL POWDER AND PROCESS FOR PREPARING THE SAME

ABSTRACT OF THE DISCLOSURE

A nickel powder having at at least part of the surface thereof a layer of a composite oxide represented by the formula: $A_xB_yO_{(x+2y)}$, wherein A stands for at least one element selected from the group consisting of Ca, Sr and Ba; B stands for at least one element selected from the group consisting of Ti and Zr; and x and y represent numbers satisfying the formula: $0.5 \leq y/x \leq 4.5$). The nickel powder may further contains at least one selected from among boron oxide, aluminum oxide and silicon oxide. The nickel powder is produced by spray pyrolyzing a solution of thermal decomposable starting compounds of nickel and additive elements and the resultant powder is suitable for use in a thick-film conductor paste having a sintering-starting temperature close to that of ceramic layers and a shrinkage behavior close to that of a ceramic without detriment to the conductivity and electric properties thereof.