

Abstract

AN AIR-HEATING TYPE HEAT NOT BURN HEATING DEVICE, A CERAMIC HEATING ELEMENT AND A PREPARATION METHOD THEREOF

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The present invention discloses an air-heating type heat not burn heating device, a ceramic heating element and a preparation method thereof, wherein the ceramic heating element comprises a honeycomb ceramic body, porous channels are arranged in the honeycomb ceramic body, and the porous channels are circular holes or polygonal holes; and a heating printed circuit, 10 which is arranged around an outer surface of the honeycomb ceramic body to heat the air passing through the porous channels. According to the ceramic heating element of the present invention, the surface made of high purity alumina honeycomb ceramic has high compactness, it is able to effectively prevent absorption of smoke dust particles, thus to effectively preventing odd smell; the high-purity alumina honeycomb ceramic has good thermal conductivity, with a thermal 15 conductivity of 33W/mk; the wall thickness and pore diameter in the honeycomb ceramic structure are both very small, and the thermal conductivity is extremely excellent; the shape of the honeycomb porous can greatly increase the contact area with air, the alumina honeycomb ceramics has large specific area, and high heating efficiency, which is favorable for quickly heating the air.

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(Fig. 1)