

Title (en)

PROCESS FOR REDUCING THE FORMATION OF CARBON DEPOSITS, METALLIC COMPONENT AND PROCESS FOR PRODUCING CHEMICAL SUBSTANCES

Title (de)

VERFAHREN ZUR VERRINGERUNG VON KOHLENSTOFFABLAGERUNGEN, METALLISCHER STOFF UND VERFAHREN ZUR HERSTELLUNG VON CHEMISCHEN SUBSTANZEN

Title (fr)

PROCEDE DE REDUCTION DE LA FORMATION DE DEPOTS DE CARBONE, COMPOSE METALLIQUE ET PROCEDE DE PRODUCTION DE PRODUITS CHIMIQUES

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Application

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Abstract (en)

[origin: WO9716507A1] The invention relates to a process for reducing the formation of catalytically induced carbon deposits (coking) on the surfaces of components designed as heat exchangers, conduits or containers and made of a heat-resistant material that consists of a heat-resistant alloy containing Cr and at least one of the two elements Fe and Ni, whereas the components are exposed to hot carbonaceous process gases in process plants for producing chemical substances, especially plants for converting hydrocarbons or other substances containing C through thermal or catalytic cracking or through steam reforming or plants for producing a CO-rich reduction gas, wherein an Al-enrichment is carried out in the surface region by means of diffusion annealing in an atmosphere containing Al. Diffusion annealing is carried out in the temperature range of 900 to 1200 DEG C at least for a part of the treatment time in an atmosphere containing Cr, until a Cr-enrichment having a penetration depth of at least 20 μ m is achieved.

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