

Title (en)

Agent for desulphurization, dephosphorization, desiliconization and denitrification of molten pig or cast iron and of molten ferrochrome or ferromanganese as well as a process

Title (de)

Mittel zur Entschwefelung, Entphosphorung, Entsilicierung und Entstickung von Roheisen-, Gusseisen-, Ferrochrom- und Ferromanganschmelzen sowie Verfahren

Title (fr)

Agent pour la désulfuration, déphosphoration, désilicification et dénitrification de bains de fonte, de fonte de moulage, de ferro-chrome et de ferromanganèse ainsi qu'un procédé

Publication

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Application

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Priority

DE 4242328 A 19921215

Abstract (en)

[origin: US5385599A] An agent for desulfurization, dephosphorization, desiliconizing, and denitrifying of ironmelt and melt containing chromium or manganese, consisting of at least one of the following mineral raw-material: alkali-containing plagioclase (feldspar), alkali-containing orthoclase, montmorillonite (perlite), bentonite, muscovite, or zeolithe, and calcium carbide and/or calcium oxide. These mixtures can be blended further with scale, Fe-ores, Cr-ores or Mn-ores and used by standard technologies. The mineralic components, in connection with calcium carbide, lime, iron-ore or scale or other related ores, cause an effective reduction of unwanted elements, such as sulfur, phosphorus, silicium, and nitrogen, in the metal melts. The slags produced are freely skimmed and contain less iron granules than standard agents. Some of these materials may be enriched with alkali oxides by sintering or melting with appropriate compounds, like soda ash. This invention also involves a process for the treatment of iron-, ferrochromium and ferromanganese melts, wherein the components of the agent are fed either pre-mixed or separately into the melt.

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