

Title (en)
CERAMIC COMPOSITIONS

Title (de)
KERAMIKZUSAMMENSETZUNGEN

Title (fr)
COMPOSITIONS DE CERAMIQUE

Publication
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Application
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Priority
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Abstract (en)
[origin: WO9801405A1] Ceramic compositions which are of particular value in the handling or casting of steel, for example as lining materials or for producing nozzles or shrouds used in continuous casting, comprise a mixture of particles of boron nitride, zirconium diboride and at least one other refractory material, bonded together by carbon produced by the decomposition of an organic binder such as a resin or pitch. The other refractory material may be for example a refractory metal, an oxide, a carbide, a boride or a nitride. Zirconium oxide containing compositions comprising 5-70 % by weight boron nitride, 5-60 % by weight zirconium diboride and 5-80 % by weight of zirconium oxide are particularly suitable for forming at least that part of a nozzle which in use is at the slag line in a molten steel vessel. Aluminium oxide containing compositions comprising 5-70 % by weight boron nitride, 15-50 % by weight zirconium diboride and 10-70 % by weight aluminium oxide are particularly suitable for forming the inside of nozzles as they resist alumina build up and prevent clogging of the nozzles.

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