

Title (en)

CAST PART WITH ENHANCED WEAR RESISTANCE

Title (de)

GIessereistücke mit verbesserter verschleissfestigkeit

Title (fr)

PIECES DE FONDERIE AVEC UNE RESISTANCE ACCRUE A L'USURE

Publication

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Application

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Abstract (en)

[origin: WO03047791A1] The invention concerns a cast wear part with its structure reinforced by at least a type metal carbide, and/or metal nitride, and/or boride, and/or metal oxides, and/or intermetallic compounds, referred to below as constituents. The invention is characterized in that the raw materials used as reagents for said constituents have been introduced in a mould (1) before casting in the form of compacted powder inserts or preforms (3) or the form of slurries (4), and the reaction of said powders has been activated in situ by casting a metal, forming a porous conglomerate in situ, and said metal has infiltrated the porous conglomerate, thus forming a reinforced structure leading to inclusion of said constituents in the structure of the metal used for casting, thereby creating a reinforcing structure on the wear part (2).

IPC 1-7

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IPC 8 full level

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C-Set (source: EP US)

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Cited by

BE1018128A3; BE1018130A3; BE1018127A3; AU2009294779B2; US8602340B2; US8999518B2; US8646192B2; US8651407B2; WO2010031661A1; WO2010031662A1; WO2010031660A1

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