

Title (en)  
CERAMIC-METAL COMPOSITE WEAR PART

Title (de)  
VERSCHLEISSTEIL AUS KERAMIK-METALL-VERBUNDWERKSTOFF

Title (fr)  
PIÈCE D'USURE COMPOSITE CÉRAMIQUE-MÉTAL

Publication  
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Application  
**EP 20177457 A 20200529**

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Abstract (en)  
[origin: CA3184352A1] The present invention relates to a wear part made by casting with a reinforced part comprising a ferrous alloy reinforced with metal carbides, nitrides, borides or made of intermetallic alloys for which the reinforced part comprises metal carbide, nitride, boride inserts or intermetallic compounds, previously-manufactured, with defined geometry and inserted into a structure that can be infiltrated with agglomerated grains comprising the reagents needed to form metal or intermetallic carbides, nitrides, borides according to a thermal reaction that is auto-propagated in situ, triggered when the ferrous alloy is cast.

Abstract (fr)  
La présente invention se rapporte à une pièce d'usure réalisée en fonderie avec une partie renforcée comprenant un alliage ferreux renforcé avec des carbures, nitrures, borures métalliques ou en alliages intermétalliques pour laquelle ladite partie renforcée comprend des inserts de carbures, nitrures, borures métalliques ou des composés intermétalliques préalablement fabriqués de géométrie définie insérés dans une structure infiltrable de grains agglomérés comprenant les réactifs nécessaires à la formation de carbures, nitrures, borures métalliques ou intermétalliques selon une réaction thermique auto-propagée in situ déclenchée lors de la coulée de l'alliage ferreux.

IPC 8 full level  
**B22F 3/00** (2021.01); **B02C 2/00** (2006.01); **B02C 13/28** (2006.01); **B22D 19/02** (2006.01); **B22D 19/04** (2006.01); **B22D 19/06** (2006.01); **B22D 19/08** (2006.01); **B22F 3/23** (2006.01); **B22F 5/00** (2006.01); **B22F 7/00** (2006.01); **B22F 7/06** (2006.01); **C22C 1/04** (2006.01); **C22C 1/05** (2006.01); **C22C 1/10** (2006.01); **C22C 33/02** (2006.01); **C22C 33/04** (2006.01)

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