

Title (en)
ABRASIVE RESISTANT WHITE CAST IRON.

Title (de)
ABSCHLEIFBESTÄNDIGES WEISSES GUSSEISEN.

Title (fr)
FONTE BLANCHE RESISTANT A L'ABRASION.

Publication
EP 0113715 A4 19850424 (EN)

Application
EP 82902587 A 19820719

Priority
US 8200976 W 19820719

Abstract (en)
[origin: WO8400385A1] A white cast iron having toughness, high tensile strength and abrasion resistance containing 0.1 % to 4.0 % boron in an iron-carbon alloy with the carbides in the form of globules and of an average size less than 4 microns. This white cast iron is produced by incorporating the boron in the composition to form a melt, super cooling the melt while liquid to at least 50F below the equilibrium solidification temperature between 2200oF to 2400oF and then solidifying the melt to produce the globules of carbides uniformly dispersed and having a size much smaller than the size of the carbide particles of conventional cast iron.

IPC 1-7
C22C 37/08

IPC 8 full level
C22C 33/08 (2006.01); **C22C 37/00** (2006.01); **C22C 37/06** (2006.01); **C22C 37/08** (2006.01)

CPC (source: EP)
C22C 37/00 (2013.01); **C22C 37/06** (2013.01); **C22C 37/08** (2013.01)

Citation (search report)

- [X] GB 1302321 A 19730110
- [X] DE 1209756 B 19660127 - UNION CARBIDE CORP
- [X] CH 189692 A 19370315 - IND RESEARCH LAB LTD [US]
- [X] GB 1100200 A 19680124 - EUTECTIC WELDING ALLOYS
- [X] SU 121467 A2 19581130 - KONTOROV B M, et al
- [X] FR 1089531 A 19550318 - CIE DE PONT A MOUSSON
- [X] FR 1600084 A 19700720

Designated contracting state (EPC)
BE FR

DOCDB simple family (publication)
WO 8400385 A1 19840202; AU 557815 B2 19870108; AU 8824982 A 19840208; CH 660753 A5 19870615; CH 661286 A5 19870715; DE 3390167 T1 19841129; EP 0113715 A1 19840725; EP 0113715 A4 19850424; GB 2134542 A 19840815; GB 2134542 B 19870603; GB 8406512 D0 19840418; JP S59501551 A 19840830; NL 8220290 A 19840601

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US 8200976 W 19820719; AU 8824982 A 19820719; CH 144184 A 19820719; CH 378486 A 19820719; DE 3390167 T 19820719; EP 82902587 A 19820719; GB 8406512 A 19820719; JP 50253882 A 19820719; NL 8220290 A 19820719