

Title (en)
ABRASIVE RESISTANT WHITE CAST IRON.

Title (de)
VERSCHLEISSFESTES WEISSES GUSSEISEN.

Title (fr)
FONTE BLANCHE RESISTANT AUX ABRASIFS.

Publication
EP 0159981 A4 19870429 (EN)

Application
EP 83903718 A 19831024

Priority
US 8301656 W 19831024

Abstract (en)
[origin: WO8501962A1] A white cast iron having toughness, high tensile strength and abrasion resistance containing 0.01% 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 5°F below the equilibrium solidification temperature between 2200°F to 2400°F 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 37/08 (2006.01); **C22C 37/00** (2006.01)

CPC (source: EP)
C22C 37/00 (2013.01)

Citation (search report)

- [A] SU 168322 A1 19650218
- [A] SU 954481 A1 19820830 - GOMELSKIJ BRUSS POLT INST [SU]
- [E] WO 8400385 A1 19840202 - GIW IND INC [US]
- [XP] WO 8404760 A1 19841206 - VICKERS AUSTRALIA LTD [AU]
- [A] CHEMICAL ABSTRACTS, vol. 82, no. 22, 2nd June 1975, page 235, abstract no. 143600z, Columbus, Ohio, US; & JP-A-74 106 425 (RESEARCH INSTITUTE FOR IRON, STEEL AND OTHER METALS, TOHOKU UNIVERSITY) 09-10-1974
- See references of WO 8501962A1

Designated contracting state (EPC)
BE FR

DOCDB simple family (publication)
WO 8501962 A1 19850509; CH 666908 A5 19880831; DE 3390548 C2 19881201; DE 3390548 T1 19851128; EP 0159981 A1 19851106; EP 0159981 A4 19870429; GB 2158462 A 19851113; GB 2158462 B 19880224; GB 8515282 D0 19850717; JP S60501958 A 19851114; NL 8320359 A 19850902

DOCDB simple family (application)
US 8301656 W 19831024; CH 283985 A 19831024; DE 3390548 T 19831024; EP 83903718 A 19831024; GB 8515282 A 19831024; JP 50375283 A 19831024; NL 8320359 A 19831024