

Title (en)
SPHEROIDAL CAST ALLOY

Title (de)
SPHÄROGUSSLEGIERUNG

Title (fr)
ALLIAGE EN FONTE À GRAPHITE SPHÉROIDAL

Publication
EP 3243920 B1 20200429 (DE)

Application
EP 17162715 A 20170324

Priority
EP 17162715 A 20170324

Abstract (en)
[origin: US2018274066A1] A nodular cast alloy, a casting made therefrom, and a production process therefor, which has a perlitic-ferritic microstructure for cast iron products and has a high strength combined with good ductility and toughness even in the cast state, including, as nonferrous constituents, C, Si, Ni, Mn, Cu, Mg, Cr, Al, P, S and normal impurities, characterized in that the nodular cast alloy in the cast state without subsequent heat treatment achieves a high static strength of a 0.2% offset yield strength of ≥ 600 MPa and a tensile strength of ≥ 750 MPa combined with good ductility of an elongation at break A5 of from 2 to 10%.

IPC 8 full level
C22C 37/04 (2006.01); **C21C 1/10** (2006.01); **C22C 37/08** (2006.01); **C22C 37/10** (2006.01); **B22D 15/00** (2006.01); **C21D 5/00** (2006.01); **C21D 5/14** (2006.01)

CPC (source: CN EP US)
C21C 1/10 (2013.01 - EP US); **C22C 37/04** (2013.01 - CN EP US); **C22C 37/08** (2013.01 - CN EP US); **C22C 37/10** (2013.01 - CN EP US); **B22D 15/00** (2013.01 - EP US); **C21D 5/00** (2013.01 - EP US); **C21D 5/14** (2013.01 - EP US); **C21D 2211/005** (2013.01 - CN EP US); **C21D 2211/009** (2013.01 - CN EP US)

Cited by
WO2023111403A1; WO2023110683A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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