

Title (en)

Cylinder liner unit for use in an internal combustion engine.

Title (de)

Zylinderlaufbuchse für eine Brennkraftmaschine.

Title (fr)

Chemise de cylindre pour un moteur à combustion interne.

Publication

**EP 0525540 B1 19941228 (DE)**

Application

**EP 92112215 A 19920717**

Priority

DE 4124996 A 19910727

Abstract (en)

[origin: EP0525540A1] In a cylinder liner for use in an internal combustion engine, especially for a large diesel engine, and cast from perlitic cast iron with spheroidal graphite as the basic alloy, the microstructure of the cast iron also comprises clearly delimited cementite/steadite proportions, which are uniformly distributed like a network and cover an area fraction of from 3 to 8%. The basic alloy additionally has admixed to it boron at from 0.01 to 0.03 and/or phosphorus at from 0.2 to 0.4 and - if required - vanadium at from 0.1 to 0.3 per cent by weight as alloy elements.

IPC 1-7

**C22C 37/04**; **F02F 1/08**

IPC 8 full level

**C21C 1/10** (2006.01); **C22C 37/00** (2006.01); **C22C 37/04** (2006.01); **F02F 1/00** (2006.01); **F02F 1/08** (2006.01); **F02B 3/06** (2006.01)

CPC (source: EP)

**C22C 37/04** (2013.01); **F02F 1/08** (2013.01); **F02B 3/06** (2013.01); **F02F 2007/0097** (2013.01); **F05C 2203/04** (2013.01)

Cited by

EP1270747A3; EP0872567A1; DE102007041519A1; DE4438073A1; FR2726035A1; EP2392812A1; US9873928B2; US8771589B2; WO2006056334A1; WO2017160782A1; WO9410354A1; US8394207B2; US9581103B1; US10107227B2

Designated contracting state (EPC)

CH DE FR IT LI

DOCDB simple family (publication)

**EP 0525540 A1 19930203**; **EP 0525540 B1 19941228**; DE 59201079 D1 19950209; FI 101816 B1 19980831; FI 101816 B 19980831; FI 923174 A0 19920709; FI 923174 A 19930128; JP 2962621 B2 19991012; JP H05214482 A 19930824

DOCDB simple family (application)

**EP 92112215 A 19920717**; DE 59201079 T 19920717; FI 923174 A 19920709; JP 21842692 A 19920724