

Title (en)  
CAST IRON MATERIAL

Title (de)  
EISENGUSSWERKSTOFF

Title (fr)  
MATERIAU DE FONTE

Publication  
**EP 1646732 B1 20071219 (DE)**

Application  
**EP 04741074 A 20040716**

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Abstract (en)  
[origin: WO2005007913A1] The invention relates to an iron material comprising lamellar graphite, which permits a simple adjustment of the optimal properties for a wide range of products, by variation of the content of the alloy components. The above is achieved with a cast iron material comprising (in wt.%): 3.4 4.1 % C, 0.9 1.4 % Si, 0.4 0.7 % Mn, 0.4 0.6 % Cu, 0.01 0.04 % S, 0.003 0.007 % O<sub>2</sub>, = 0.04 % P the remainder being iron and unavoidable impurities. The following can also optionally be contained either individually or in combination: 0.15 0.45 % Mo, 0.005 0.02 % La, 0.0005 0.01 % Sr, 0.05 0.8 % Ni, 0.005 0.1 % V, 0.05 0.15 % Sn, 0.05 0.08 % N and 0.01 0.02 % Ce. For a saturation degree  $Sc = C \% / 4,26 - 0,3 * (Si \% + P \%)$ , then:  $0.85 \% = Sc = 1.05 \%$  and for the amount %MEG (amount of eutectic graphite) =  $2.25 \% - 0.2 Si \%$  then:  $1.97 \% = MEG = 2.07 \%$ .

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**C22C 37/00** (2006.01)

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Cited by  
EP1992711A1; EP2646589A4; WO2012074470A1

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