

Title (en)
PISTON FOR AN INTERNAL COMBUSTION ENGINE, INTERNAL COMBUSTION ENGINE HAVING A PISTON, AND USE OF AN IRON-BASED ALLOY

Title (de)
KOLBEN FÜR EINEN VERBRENNUNGSMOTOR, VERBRENNUNGSMOTOR MIT EINEM KOLBEN UND VERWENDUNG EINER EISENBASIERTEN LEGIERUNG

Title (fr)
PISTON POUR MOTEUR À COMBUSTION INTERNE, MOTEUR À COMBUSTION INTERNE COMPORTANT UN PISTON ET UTILISATION D'UN ALLIAGE À BASE DE FER

Publication
EP 4211284 A1 20230719 (DE)

Application
EP 21773566 A 20210908

Priority
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Abstract (en)
[origin: WO2022053484A1] A piston for an internal combustion engine, in particular for a diesel engine, consists of an iron-based alloy comprising the following alloy elements in percent by weight (wt%): carbon (C): 0.07 to 0.24; chromium (Cr): > 7.0 to 12.5; molybdenum (Mo): 0.3 to 1.2; manganese (Mn): 0.3 to 0.9; silicon (Si): < 0.5; copper (Cu): < 0.3; nickel (Ni): < 0.8; vanadium (V): 0.15 to 0.35; sulphur (S): < 0.015; phosphorus (P): < 0.025; niobium (Nb): < 0.1; nitrogen (N): < 0.07; aluminium (Al): < 0.04; tungsten (W): < 2.5 and the remainder being iron (Fe) and unavoidable impurities. The invention also relates to the use of such an iron-based alloy for pistons of an internal combustion engine, in particular of a diesel engine.

IPC 8 full level
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Citation (search report)
See references of WO 2022053484A1

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