

Title (en)

RECIPROCATING PISTON OF AN INTERNAL COMBUSTION ENGINE WITH AN AT LEAST PARTIALLY REINFORCED RUNNING SURFACE

Title (de)

HUBKOLBEN EINES VERBRENNUNGSMOTORS MIT EINER ZUMINDEST TEILWEISEN LAUFFLÄCHENBEWEHRUNG

Title (fr)

PISTON ALTERNATIF D'UN MOTEUR A COMBUSTION INTERNE DONT LA SURFACE D'USURE COMPORTE UN RENFORCEMENT AU MOINS PARTIEL

Publication

EP 0692068 A1 19960117 (DE)

Application

EP 94911087 A 19940328

Priority

- DE 9400351 W 19940328
- DE 4310491 A 19930331

Abstract (en)

[origin: WO9423193A1] An economical resistant bearing surface reinforcement is to be provided for a reciprocating piston of an internal combustion engine, especially one using an aluminium alloy as the basic material, especially one such designed for an engine with cylinder running surface of alluminium alloy. To this end, the prior art galvanically applied steel, nickel or chromium coatings are to be replaced by a synthetic-resin-bonded graphite coating with incorporated metal particles. The metal particles may be nickel, steel, bronze, chromium, silver or alloys thereof. The running layer may also be a thin, adhesively secured metal foil. As a further alternative, the bearing layer may also be formed by metal plates secured to the piston body mechanically or by casting.

IPC 1-7

F02F 3/10; **F16J 1/02**

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

See references of WO 9423193A1

Citation (third parties)

Third party :

- US 3906923 A 19750923 - HARKER HARRY E
- JP S63125821 A 19880530 - HONDA MOTOR CO LTD

Designated contracting state (EPC)

DE FR GB IT

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DOCDB simple family (application)

DE 4310491 A 19930331; BR 9406242 A 19940328; DE 59409395 T 19940328; DE 9400351 W 19940328; EP 94911087 A 19940328; EP 96120559 A 19940328; JP 52153394 A 19940328