Title (en)

FREE PISTON ENGINE GENERATOR

Title (de)

FREIKOLBENMOTOR-GENERATOR

Title (fr)

GÉNÉRATEUR À MOTEUR À PISTON LIBRE

Publication

EP 2542768 A1 20130109 (EN)

Application

EP 11743855 A 20110621

Priority

- GB 201021406 A 20101217
- GB 2011051154 W 20110621

Abstract (en)

[origin: GB2482375A] A method of manufacturing a free-piston engine generator, the method comprising providing a cylinder 1 that accommodates at least one piston 2 configured to reciprocate within the cylinder, extruding a cylinder housing that is arranged to retain and provide structural support for the cylinder and securing the cylinder within the cylinder housing such that the cylinder wall is reinforced by the structure of the cylinder housing. At least one magnetisable element may be arranged to provide load-bearing support to the cylinder and the cylinder may be secured within the cylinder housing using an adhesive material on the outside of the cylinder, where the adhesive material provides thermal insulation between the cylinder and cylinder housing. Preferably the cylinder housing is provided with cooling elements and a coating is provided on the interior wall of the cylinder with a friction reducing material provided between the interior wall and a piston passing along it. The piston may be constructed using alternating magnetisable-elements 9c and non-magnetisable elements.

IPC 8 full level

F02B 63/04 (2006.01); **F02B 71/04** (2006.01); **H02K 7/18** (2006.01)

CPC (source: EP GB KR US)

B21C 23/14 (2013.01 - GB); **B21K 3/00** (2013.01 - US); **F02B 63/04** (2013.01 - EP KR US); **F02B 71/04** (2013.01 - EP GB KR US); **H02K 7/18** (2013.01 - KR); **H02K 7/1884** (2013.01 - EP GB US); Y10T 29/49231 (2015.01 - EP US)

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DOCDB simple family (publication)

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