

Title (en)

FREE-PISTON DEVICE AND METHOD FOR OPERATING A FREE-PISTON DEVICE

Title (de)

FREIKOLBENVORRICHTUNG UND VERFAHREN ZUM BETREIBEN EINER FREIKOLBENVORRICHTUNG

Title (fr)

DISPOSITIF À PISTON LIBRE ET PROCÉDÉ POUR FAIRE FONCTIONNER UN DISPOSITIF À PISTON LIBRE

Publication

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Application

EP 17723378 A 20170512

Priority

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Abstract (en)

[origin: WO2017198579A1] Free-piston device and method for operation, having a piston (24) which is arranged so as to be movable linearly to an fro, and having a combustion chamber (40) which is delimited by a wall (38) and in which there are formed a first opening (42) and a second opening (44) which comprise an inlet opening (46) and an outlet opening (48), wherein the movement of the at least one piston device (18) can be controlled by means of a control device (78). To ensure that an operating point of the free-piston device can be set in a more versatile manner, the bottom dead centre of the piston (24) is adjustable, wherein, when the piston (24) assumes the bottom dead centre, the at least one first opening (42) is partially freed and partially blocked in order to set a free cross-sectional area. Alternatively, an opening period (112, 114) can be set while the piston (24) at least partially frees the at least one first opening (42) when passing through the bottom dead centre, also with maintaining of the position of the bottom dead centre.

IPC 8 full level

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CPC (source: EP US)

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