

Title (en)
Linear compressor controller

Title (de)
Steuerungsvorrichtung für einen linear angetriebenen Verdichter

Title (fr)
Système de contrôle pour un compresseur linéaire

Publication
EP 1715184 B1 20080319 (EN)

Application
EP 06006967 A 20060331

Priority
• NZ 53955405 A 20050419
• NZ 54164605 A 20050725

Abstract (en)
[origin: EP1715184A1] A free-piston linear compressor (1) controlled to achieve high volumetric efficiency by a controller including an algorithm (116) for ramping up input power until piston-cylinder head collisions are detected using a detection algorithm (117/118) which then decrements power input whereupon input power is again ramped up by algorithm (116). Non-damaging low energy collisions are achieved by the controller including a perturbation algorithm (119) which perturbs the input power ramp with periodic transient pulses of power to ensure piston collisions are provoked during the transient power pulses.

IPC 8 full level
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CPC (source: EP)
F04B 35/045 (2013.01); **F04B 2201/0202** (2013.01); **F04B 2201/0206** (2013.01); **F04B 2201/0209** (2013.01)

Cited by
CN112746948A; DE102007030383A1; US8694131B2; WO2012133475A3

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

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