

Title (en)
Pressure wave machine.

Title (de)
Druckwellenmaschine.

Title (fr)
Machine à ondes de pression.

Publication
EP 0036045 A1 19810923 (DE)

Application
EP 80200243 A 19800317

Priority
EP 80200243 A 19800317

Abstract (en)
[origin: US4397613A] In order to reduce the intermixing of air and exhaust gases in the cells of gas dynamic compression wave machines caused by the formation of shear layer vortices, the geometry of the leading side of the high pressure inlet orifice facing the bucket wheel has a curved convex or convex-polygonal configuration. Also, the ends of cell walls at the gas inlet ends thereof can be of a profiled configuration to further improve the gas flow conditions in the cells.

Abstract (de)
Zur Verminderung der Vermischung von Luft und Abgasen in gasdynamischen Druckwellenmaschinen wird vorgeschlagen, daß zur Verhinderung von Scherschichtwirbeln die Geometrie der Hochdruckgas-Eintrittsöffnungen (12) an der Mündung zum Zellenrand eine konvexe oder konvexpolygonale Profilform (5) aufweist, und daß weiterhin zur Erzielung einer besseren Zellenströmung die gasseitigen Enden der Zellenwände ebenfalls profilartig (10) ausgebildet werden.

IPC 1-7
F02B 33/42

IPC 8 full level
F02B 33/42 (2006.01); **F04F 13/00** (2009.01); **G21F 9/30** (2006.01)

IPC 8 main group level
F04F 99/00 (2009.01)

CPC (source: EP US)
F04F 13/00 (2013.01 - EP US)

Citation (search report)
• [A] CH 399077 A 19660331 - POWER JETS RESEARCH AND DEV LI [GB]
• [A] CH 301135 A 19540831 - JENDRASSIK GEORGE [GB]
• [A] FR 876601 A 19421111 - BROWN
• [A] DE 962026 C 19570418 - BBC BROWN BOVERI & CIE
• [A] FR 1038377 A 19530928 - AUSTIN MOTOR CO LTD
• [D] US 3074622 A 19630122 - MAX BERCHTOLD

Cited by
CH687827A5

Designated contracting state (EPC)
AT CH DE FR GB IT SE

DOCDB simple family (publication)
EP 0036045 A1 19810923; EP 0036045 B1 19840606; AT E7811 T1 19840615; DE 3068091 D1 19840712; JP H0248760 B2 19901026; JP S56146100 A 19811113; US 4397613 A 19830809

DOCDB simple family (application)
EP 80200243 A 19800317; AT 80200243 T 19800317; DE 3068091 T 19800317; JP 3668381 A 19810316; US 23262281 A 19810209