

Title (en)
RECIPROCATING COMPRESSOR

Title (de)
HUBKOLBENVERDICHTER

Title (fr)
COMPRESSEUR À MOUVEMENT ALTERNATIF

Publication
EP 1936195 A1 20080625 (EN)

Application
EP 06730151 A 20060328

Priority
• JP 2006306203 W 20060328
• JP 2005259191 A 20050907

Abstract (en)
The durability of a reed valve is improved by assuring a higher level of resistance to fatigue through distribution of stress that would otherwise concentrate at the base end portion of the reed valve and also better compressor performance is assured. The compressor that includes a valve plate disposed between a cylinder block with cylinder bores formed therein and a cylinder head with a space for temporarily storing a working fluid formed therein, with ports communicating between the cylinder bores and the space formed at the valve plate and the ports opened/closed by reed valves. The reed valve includes a seat portion 30a located at the front end of a deformation area, which becomes seated at a peripheral edge of the port, and a base end portion 30b fixed to the valve plate and constituting a base end of the deformation area. The modulus of section of the base end portion 30b is set greater than the modulus of section of the seat portion 30a.

IPC 8 full level
F04B 39/10 (2006.01)

CPC (source: EP)
F04B 27/1009 (2013.01)

Citation (search report)
See references of WO 2007029366A1

Cited by
EP3584440A3; US8622315B2

Designated contracting state (EPC)
DE FR

DOCDB simple family (publication)
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EP 06730151 A 20060328; JP 2006306203 W 20060328; JP 2007534252 A 20060328