

Title (en)
Rotary sliding-vane air compressor

Title (de)
Flügelzellenverdichter

Title (fr)
Comresseur à palettes

Publication
EP 1167769 A3 20030102 (EN)

Application
EP 01112998 A 20010611

Priority
IT MI20001431 A 20000626

Abstract (en)
[origin: EP1167769A2] 1. A rotary sliding-vane compressor comprising: a longitudinally extended cylindrical stator (3) having an internal cylindrical surface defining a compression chamber (7); a longitudinally extended cylindrical rotor (9) eccentrically inserted in said stator (3), said rotor (9) having a series of radial grooves (11) which extend longitudinally to the rotor (9); and a series of longitudinally extended radial vanes (13), each vane (13) having an apex and a base of the vane (13) and being radially slidable in one corresponding groove (11) of the rotor (9) between a radially retracted position and a radially extended position; at the radially extended position each vane (13) coming into contact with the internal cylindrical surface of the stator (3) along a longitudinal contact generatrix (23) separating two compression zones (19m, 19v) of said compression chamber (7) with different pressure, the compression zone (19m) with lower pressure being in fluid communication with a space (27) between the base (25) of the vane (13) and the groove (11) wherein the vane (13) slides; characterised in that the apex of each vane (13) provides a nose (30) projecting into the compression zone with higher pressure (19v). <IMAGE>

IPC 1-7
F04C 18/344

IPC 8 full level
F01C 21/08 (2006.01)

CPC (source: EP)
F01C 21/0809 (2013.01)

Citation (search report)
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CN109026696A; US7980837B2

Designated contracting state (EPC)
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