

Title (en)
Vane type camshaft phaser

Title (de)
Flügelzellen-Nockenwellenversteller

Title (fr)
Déphaseur d'arbre à cames à palettes

Publication
EP 1605141 B1 20150708 (DE)

Application
EP 05010197 A 20050511

Priority
DE 102004027950 A 20040608

Abstract (en)
[origin: EP1605141A2] A rotor connected to a camshaft, is rotated relative to a stator. Several radially protruding blades are inserted into the blade grooves (14) formed in the rotor. A rounded transition region is arranged between the side faces (15,16) and bottom (17) of the groove. The transition region is formed as circular arc segments (18,19) and as undercut to the side faces of the groove.

IPC 8 full level
F01L 1/344 (2006.01)

CPC (source: EP KR US)
B23D 47/00 (2013.01 - KR); **B23D 47/04** (2013.01 - KR); **B23D 47/08** (2013.01 - KR); **B23D 61/02** (2013.01 - KR);
F01L 1/3442 (2013.01 - EP US); **F01L 2820/01** (2013.01 - EP US)

Citation (examination)
• US 2002038501 A1 20020404 - IWASAKI KAZUTOSHI [JP], et al
• US 2004074458 A1 20040422 - NAKAMURA MOTOO [JP], et al

Cited by
CN110410169A

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
EP 1605141 A2 20051214; EP 1605141 A3 20090408; EP 1605141 B1 20150708; CN 100543277 C 20090923; CN 1707072 A 20051214;
DE 102004027950 A1 20060216; KR 101239494 B1 20130305; KR 20060048224 A 20060518; US 2005268874 A1 20051208;
US 7188596 B2 20070313

DOCDB simple family (application)
EP 05010197 A 20050511; CN 200510076116 A 20050608; DE 102004027950 A 20040608; KR 20050048339 A 20050607;
US 14669805 A 20050607