

Title (en)  
Supercharger coupling

Title (de)  
Vorverdichterkupplung

Title (fr)  
Couplage de surpresseur

Publication  
**EP 2767718 A1 20140820 (EN)**

Application  
**EP 14155147 A 20140214**

Priority  
US 201313768656 A 20130215

Abstract (en)  
A rotational element coupling device in a supercharger includes a rotatable output shaft having tapered external splines and an output shaft axis of rotation. A coupling disk has a disk axis of rotation coaxial with the output shaft axis of rotation, a tapered internally splined bore coaxial with the disk axis of rotation to engage the tapered external splines, and a plurality of apertures defined in the coupling disk parallel to the disk axis of rotation. A plurality of pins each have a disk end and a timing gear end distal to the disk end. The plurality of pins matingly engages with the coupling disk at the disk end of the pins via the plurality of apertures. A timing gear is fixed to a supercharger rotor for rotation therewith. The timing gear has a plurality of apertures disposed therein to matingly engage with the timing gear end of the plurality of pins.

IPC 8 full level  
**F02B 33/38** (2006.01); **F02B 39/04** (2006.01); **F04C 18/12** (2006.01); **F04C 29/00** (2006.01); **F04C 29/12** (2006.01)

CPC (source: EP)  
**F02B 33/38** (2013.01); **F04C 18/126** (2013.01); **F04C 29/005** (2013.01); **F04C 29/122** (2013.01); **F02B 39/04** (2013.01)

Citation (applicant)  
• US 5078583 A 19920107 - HAMPTON KEITH [US], et al  
• US 5893355 A 19990413 - GLOVER RODNEY C [US], et al

Citation (search report)  
• [Y] US 2012037473 A1 20120216 - OUWENGA DANIEL ROBERT [US]  
• [Y] AU 20111100997 A4 20111117 - HENGDIAN GROUP LINUX MOTOR CO LTD [CN]  
• [A] US 4953517 A 19900904 - MCGOVERN KEVIN M [US], et al  
• [A] US 5281116 A 19940125 - GWIN DARWIN L [US]  
• [A] CN 201246400 Y 20090527 - HANGZHOU XINGGUANG MACHINERY C [CN]

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 2767718 A1 20140820**; **EP 2767718 B1 20180411**; CN 103993953 A 20140820; CN 203809109 U 20140903

DOCDB simple family (application)  
**EP 14155147 A 20140214**; CN 201410111339 A 20140214; CN 201420134720 U 20140214