

Title (en)  
Covering ring for starter device

Title (de)  
Abdeckring für Startvorrichtung

Title (fr)  
Bague de recouvrement pour un dispositif de démarrage

Publication  
**EP 2375055 A3 20170510 (DE)**

Application  
**EP 11157016 A 20110304**

Priority  
DE 102010003823 A 20100409

Abstract (en)  
[origin: EP2375055A2] The seal has a rubber bellow (214) provided for sealing an inner area of a toe-in actuator and fastened to a housing (156) by using a deformable covering ring (210), where the rubber bellow has a cylindrical middle section. The covering ring is accommodated in a recess of a drive end bearing housing (19). The recess is graded in such a manner that movement possibility of the ring in a direction is limited by a circumferential surface between two layers of the recess, where breadth of the ring is smaller than the breadth of a collar for accommodating the rubber bellow at the housing.

IPC 8 full level  
**F02N 15/00** (2006.01); **F02N 15/06** (2006.01); **H01H 51/06** (2006.01)

CPC (source: EP)  
**F02N 15/00** (2013.01); **F02N 15/067** (2013.01); **H01H 51/065** (2013.01); **H01H 50/023** (2013.01)

Citation (search report)

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- [A] US 2004134294 A1 20040715 - HIRABAYASHI TAKASHI [JP], et al
- [AD] DE 10124506 A1 20021121 - VOLKSWAGEN AG [DE]

Cited by  
EP3021343A1; CN105679608A

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 2375055 A2 20111012; EP 2375055 A3 20170510; EP 2375055 B1 20181003**; CN 102213175 A 20111012; CN 102213175 B 20150603; DE 102010003823 A1 20111013; DE 102010003823 B4 20190328; HU E040667 T2 20190328

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**EP 11157016 A 20110304**; CN 201110091345 A 20110407; DE 102010003823 A 20100409; HU E11157016 A 20110304