

Title (en)  
NOISE OPTIMIZED STARTER DEVICE

Title (de)  
GERÄUSCHOPTIMIERTE STARTERVORRICHTUNG

Title (fr)  
DISPOSITIF DE DÉMARRAGE INSONORISÉ

Publication  
**EP 2655862 A2 20131030 (DE)**

Application  
**EP 11794125 A 20111207**

Priority  
• DE 102010063507 A 20101220  
• EP 2011072012 W 20111207

Abstract (en)  
[origin: WO2012084512A2] The invention relates to a starter device (10), in particular for starting internal combustion engines, with a starter pinion (22) which is engaged in a ring gear (25) of an internal combustion engine. The starter pinion (22) has an end side (210) which is either provided with a damping layer (212) or comprises a damping element (208) which lies opposite a retaining ring (202).

IPC 8 full level  
**F02N 15/06** (2006.01)

CPC (source: EP)  
**F02N 15/063** (2013.01)

Citation (search report)  
See references of WO 2012084512A2

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

DOCDB simple family (publication)  
**WO 2012084512 A2 20120628; WO 2012084512 A3 20121122**; CN 103384762 A 20131106; DE 102010063507 A1 20120621;  
EP 2655862 A2 20131030

DOCDB simple family (application)  
**EP 2011072012 W 20111207**; CN 201180067968 A 20111207; DE 102010063507 A 20101220; EP 11794125 A 20111207