

Title (en)

DEVICE AND METHOD FOR PROTECTING A STARTER HAVING HIGH ROTATIONAL INERTIA

Title (de)

VORRICHTUNG UND VERFAHREN ZUM SCHUTZ EINES STARTERS MIT HOHEM TRÄGHEITSMOMENT

Title (fr)

DISPOSITIF ET PROCEDE DE PROTECTION D'UN DEMARREUR A GRANDE INERTIE DE ROTATION

Publication

**EP 2612019 A2 20130710 (FR)**

Application

**EP 11761662 A 20110824**

Priority

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- FR 2011051958 W 20110824

Abstract (en)

[origin: WO2012028805A2] The invention relates to the field of starting and restarting an internal combustion engine. The invention relates to a method for controlling a starter for an internal combustion engine and a device for protecting a ring gear of the internal combustion engine and a pinion of the starter. According to the invention, the pinion is prevented from engaging with the ring gear for a predetermined period of time counted from the end of the preceding start, the period of time being predetermined according to a rotational speed of the starter estimated at the end of the preceding start, as well as according to a model (21, 22) providing an estimation of a stopping period of the starter according to the rotational speed thereof at the end of a start. The rotational speed of the starter is estimated as being equal either to the no-load rotational speed of the starter in the event the overrunning clutch of the starter is engaged, or to the rotational speed of the internal combustion engine.

IPC 8 full level

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