

Title (en)  
ENGAGING RELAY FOR STARTERS OF INTERNAL COMBUSTION ENGINES

Title (de)  
EINRÜCKRELAIS FÜR STARTER VON BRENNKRAFTMASCHINEN

Title (fr)  
CONTACTEUR ELECTROMAGNETIQUE POUR DEMARREURS DE MOTEURS A COMBUSTION INTERNE

Publication  
**EP 2286429 A1 20110223 (DE)**

Application  
**EP 09753840 A 20090525**

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Abstract (en)  
[origin: WO2009144185A1] The invention relates to an engaging relay (10) for starters of internal combustion engines in which a starter pinion engages into a gear rim of the internal combustion engine by applying current to a relay winding (11) and is then driven at full power by the starter motor. The engaging relay is designed with a change-over contact (20) which connects the starter motor to the electricity supply via a resistance element (26) in the first section of the engaging path in order for the starter to rotate slowly and connects the starter motor directly to the electricity supply at the end of the engaging path. In order to independently optimize the dynamics of the engaging relay (10) while simultaneously having the starter motor rotate at a slow speed, the resistance element (26) is arranged around the longitudinal axis (x) of the relay (10) as a largely electromagnetically neutral winding that has two parallel conductors (27a, 27b), the ends of which are interconnected.

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