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(54) **Starter device for internal combustion engines**

(57) A starter device for internal combustion engines comprises a drive shaft (11), a control assembly (13) for a pinion gear (17) rotatingly and axially movable on the driver shaft (11), and a centrifugally actuated locking unit (16) fastened to the drive shaft (11) to retarding the control assembly (13) from backward sliding during starting of the engine. The control assembly (13) comprises the pinion gear (17), and a thrust element (19) coupled to the drive shaft (11) by helical splines (21), and an intermediate unidirectional roller clutch

(20). The centrifugally actuated locking unit (16) comprises face to face arranged locking members (26, 27) radially sliding into an open cage (25) fastened to rotate with the drive shaft (11). Each locking member (26, 27) is provided with an arch-shaped weight portion (30) and a tooth member (32) to stop the thrust element (19), connected by at least one intermediate arm (31). Guide means (33, 34; 42) are provided on the locking members (26, 27) and the guide cage (25) to radially guide the same locking members (26, 27) during movement under centrifugal forces.

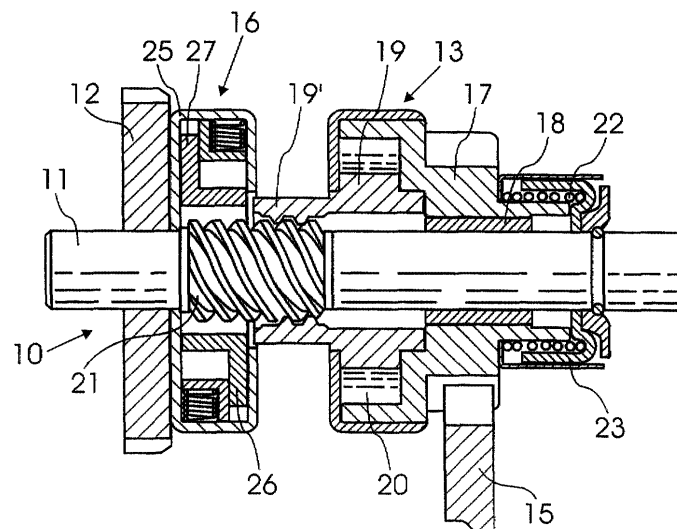


Fig. 2



European Patent Office

EUROPEAN SEARCH REPORT

Application Number  
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The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
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CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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