

Title (en)  
Starter-generator with automatically reverting freewheel

Title (de)  
Startergenerator mit selbsttätig umschaltendem Freilauf

Title (fr)  
Démarreur-générateur muni d'une roue libre auto-inverseuse

Publication  
**EP 1524430 A3 20061025 (DE)**

Application  
**EP 04022895 A 20040925**

Priority  
DE 10347422 A 20031013

Abstract (en)  
[origin: EP1524430A2] Starter generator comprises a pulley, a shaft arranged within the pulley, and a free-wheel having a clamping body loaded with a spring arrangement. The free-wheel is formed as a double free-wheel and has clamping bodies (49, 51) with a spring unit (53) between them. The clamping bodies interact with clamping gaps. A hub (19) surrounds the shaft and the clamping bodies are arranged between the hub and the pulley. A spring coupling with springs (37, 39) is provided between the hub and the shaft. An independent claim is also included for a pulley for a starter generator. Preferred Features: The springs of the spring coupling have different strengths. The first spring (37) provides a relative movement between the hub and the shaft and the second spring (39) provides a relative movement between the hub and the shaft in the opposing direction.

IPC 8 full level  
**F02N 15/02** (2006.01); **F02N 11/04** (2006.01)

CPC (source: EP)  
**F02N 15/02** (2013.01); **F02N 15/023** (2013.01); **F02N 11/04** (2013.01)

Citation (search report)

- [A] DE 10253495 A1 20030911 - INA SCHAEFFLER KG [DE]
- [AY] DE 19919449 A1 19991111 - LUK LAMELLEN & KUPPLUNGSBAU [DE]
- [AY] DE 635474 C 19360918 - ZAHNRADFABRIK FRIEDRICHSHAFEN
- [A] FR 609501 A 19260816

Cited by  
DE102009035178A1; EP2673496B1

Designated contracting state (EPC)  
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Designated extension state (EPC)  
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DOCDB simple family (publication)  
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