Title (en)

SPRING DRIVE MOTOR FOR TOY VEHICLE

Publication

EP 0150392 A3 19860212 (DE)

Application

EP 84115400 A 19841213

Priority

DE 3403296 A 19840131

Abstract (en)

[origin: US4683986A] A spring drive mechanism has a spiral spring positioned in a spring encasement as a power source. Its ends are connected, on the one hand, to a spring encasement gear and, on the other hand, to a spring shaft gear. For the purpose of winding up the spring, the spring encasement gear is in mesh with a first drive pinion and the spring shaft gear is in mesh with a second drive pinion. These drive pinions has a stress-free connection to a wind down/wind up shaft across a unidirectional torque transmitters which each permits rotation in one direction; the directions being opposite. A reverse pinion has one pinion sprocket is mesh with the spring shaft gear. The other pinion sprocket is in mesh with the drive pinion in the wind up position. In this position, the spring drive mechanism is blocked in such a way that the tensioned driving spring cannot release. In order to maintain the reverse pinion in this position without any use of external force, an engaging lever is provided and is constructed in such a way that the blocking is released when the wind down/wind up shaft is turned counterclockwise.

IPC 1-7

A63H 29/04

IPC 8 full level

A63H 29/02 (2006.01); **A63H 29/06** (2006.01); **A63H 29/24** (2006.01)

CPC (source: EP US)

A63H 29/06 (2013.01 - EP US); **A63H 29/24** (2013.01 - EP US); Y10S 185/01 (2013.01 - EP US); Y10T 74/19172 (2015.01 - EP US); Y10T 74/19177 (2015.01 - EP US)

Citation (search report)

- [AD] DE 2461625 B2 19771201
- [A] DE 2019085 A1 19711111 - DARDA HELMUT [DE]
- [A] DE 2105734 B2 19751113

Designated contracting state (EPC)

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DOCDB simple family (application)

DE 3403296 A 19840131; EP 84115400 A 19841213; JP 1365485 A 19850129; US 69507185 A 19850125