

Title (en)

DRUM SELECTOR AND ASSOCIATED TRANSMISSION ASSEMBLY

Title (de)

TROMMELWÄHLVORRICHTUNG UND ZUGEHÖRIGE GETRIEBEANORDNUNG

Title (fr)

SELECTEUR DE TAMBOUR ET ENSEMBLE DE TRANSMISSION ASSOCIE

Publication

**EP 1346163 A4 20060125 (EN)**

Application

**EP 01981965 A 20011102**

Priority

- AU 0101415 W 20011102
- AU PR123100 A 20001103

Abstract (en)

[origin: WO0236979A1] A transmission employs a drum type gear selector having circumferential pads (45) employing driving pad geometry, which allows a pad to be in full contact with the drum. Each pad has its centre of gravity "Cg" on the left side of pivot point (53) so that the pad's centrifugal force "Cf" keeps the pad out of contact with the drum when it rotates in neutral. A spring (54) has one end hooked into a slot (55) of pad (45) and its other end is anchored at point (56), and also resting on the hydraulic spring at Point (S2). The spring (54) arrangement and its shape allow spring (54) to act in two major directions required for proper operation of pad (45). One action is to pull pad (45) about its pivot point (54) to a neutral position (45A) by rotating pad (45) about pivot (53) for distance "H1" moving Point (P1) into Point (P2). At the same time when the pad is pulled to position (45A), the hydraulic spring (49) is rotated about its pivot Point (S1) to position (47A). These two movements place the pad (45) in its rest position with clearance gaps "G1" and "G2" at rear and front of the pad respectively. It has to be noted that centrifugal force "Cf" is a major force, which keeps the pads in a neutral position when gears are in free operating mode.

IPC 1-7

**F16H 3/083; F16D 25/065; F16D 21/04; F16D 13/18**

IPC 8 full level

**F16D 13/18** (2006.01); **F16D 21/04** (2006.01); **F16D 25/0632** (2006.01); **F16D 25/065** (2006.01); **F16D 27/11** (2006.01); **F16H 3/089** (2006.01)

CPC (source: EP)

**F16D 25/082** (2013.01); **F16D 27/11** (2013.01); **F16D 13/32** (2013.01); **F16D 21/04** (2013.01); **F16H 3/089** (2013.01); **F16H 2200/0047** (2013.01)

Citation (search report)

- [A] GB 1137005 A 19681218 - HORTON MFG CO INC
- [A] US 3447642 A 19690603 - OBERMOSER KARL
- [A] US 5503261 A 19960402 - SCHULTZ WESTON L [US]
- [A] GB 1326858 A 19730815 - BOSCH GMBH ROBERT
- [A] US 4635777 A 19870113 - NICKEL HANS [DE], et al
- See references of WO 0236979A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

**WO 0236979 A1 20020510;** AR 031207 A1 20030910; AU 1366602 A 20020515; AU PR123100 A0 20001130; EP 1346163 A1 20030924;  
EP 1346163 A4 20060125

DOCDB simple family (application)

**AU 0101415 W 20011102;** AR P010105166 A 20011105; AU 1366602 A 20011102; AU PR123100 A 20001103; EP 01981965 A 20011102