Title (en)

TRANSMISSION DEVICES FOR GROUND VEHICLES AND MORE PARTICULARY FOR MOTOR-CARS

Title (de)

GETRIEBEVORRICHTUNGEN FÜR LANDFAHRZEUGE UND INSBESONDERE FÜR KRAFTFAHRZEUGE

Title (fr)

DISPOSITIFS DE TRANSMISSION POUR DES VEHICULES AU SOL ET PLUS PARTICULIEREMENT POUR DES AUTOMOBILES

Publication

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Application

EP 01986396 A 20011115

Priority

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- FR 0014839 A 20001117

Abstract (en)

[origin: WO0240900A2] The epicyclic train is able to operate as a speed reducing gear when sun-wheel (5) is stuck by a one-way clutch (8), and in direct drive when clutch (10) is engaged. The whole coupling and control structure for the ratio change is essentially grouped on the sun-wheel element (5) which is slidingly movable and integral with an inverter control means (111) which engages brake (9) when disengaging clutch (10), and conversely. The brake (9) is mounted mechanically in parallel with a one way clutch (8), and allows speed reducing operation when the torque applied to the input shaft (31) is a retarding torque. The one-way clutch is mounted in parallel with an axially unslidable bearing (54) between a stator shaft (21) and a support (51) coupled for common rotation with and mutual slidability with respect to the sun-wheel element (5). For actuation of the control member (111) there is provide an hydraulic actuator (116), spring (114), and involvement of the helical teeth axial thrust (F1, F2). Useful for simplifying the control, keeping a possibility of other selective couplings, allowing other operating conditions, with the other rotary elements (6, 7) of the train, and avoiding the thrust bearings.

IPC 1-7

F16H 61/02; F16H 63/30; F16H 3/54; F16D 25/06; F16D 43/21; F16D 67/04

IPC 8 full level

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