

Title (en)

MOTORIZED HUB COMPRISING A CHANGE IN RATIO AND COUPLING AND UNCOUPLING MEANS

Title (de)

MOTORISIERTE NABE MIT VERÄNDERUNG DER ÜBERSETZUNG SOWIE KUPPLUNGS- UND ENTKUPPLUNGSMITTELN

Title (fr)

MOYEU MOTORISE COMPRENANT UN CHANGEMENT DE RAPPORT ET DES MOYENS DE COUPLAGE ET DE DECOUPLAGE

Publication

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Application

**EP 13741709 A 20130722**

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Abstract (en)

[origin: WO2014013084A1] The invention relates in particular to a motorized hub (1) for the electric drive of a wheel of a motor vehicle, said motorized hub comprising an electric traction machine (3), the electric machine comprising an external stator (32) connected to the hub carrier and an internal rotor, the motorized hub comprising reduction means (4), the motorized hub comprising coupling/uncoupling means, the motorized hub being characterized in that the reduction means comprise three reduction stages using two intermediate shafts (43, 46) and a two-ratio gear change using an axial slider (61) and in that with the driving pinion meshing with a first intermediate shaft (43), the first intermediate shaft meshing with a second intermediate shaft (46) via intermediate pinions (44, 45) and intermediate gear wheels (47, 48), the second intermediate shaft meshing with the annulus gear (71) secured to the hub (7) and the axial slider (61) being arranged on the second intermediate shaft (46) between two intermediate gear wheels (47, 48) mounted to idle on the said second intermediate shaft, the change in ratio consists in coupling the second intermediate shaft to one or other of the two idling gear wheels using the axial slider, the uncoupled position of the coupling/uncoupling means being obtained by keeping the axial slider in a central position not coupled to either one of the two idling gear wheels.

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