

Title (en)
DRIVE MECHANISM

Title (de)
ANTRIEBSVORRICHTUNG

Title (fr)
DISPOSITIF D'ENTRAINEMENT

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Application
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Abstract (en)
[origin: WO2004069576A1] The invention relates to a drive mechanism for all-wheel drive vehicles, comprising a variable-speed transmission and an interaxle differential for distributing drive torque onto a first and a second axle differential via which the front wheels and rear wheels of the motor vehicle are driven. A drive shaft of the variable-speed transmission drives a driving element of the interaxle differential while output elements of the interaxle differential are connected in a driving manner to the axle differentials. Also provided is a clutch which influences the output torque distribution. An infinitely variable output torque distribution has the following characteristics: - the output gear ratios between the first and the second axle differential are different; - the configuration of the interaxle differential (16) is such that different output torques are provided to the axle differentials, the higher output torque being applied to the axle differential that has the shorter gear ratio; - a slip-controlled multi-disk clutch (46) is mounted between the driving element (32) of the interaxle differential and the output element (36) having the lower output torque; and - the multi-disk clutch (46) can be controlled according to operating parameters of the motor vehicle in order to variably distribute the output torques of the interaxle differential.

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