

Title (en)

METHOD FOR CONTROLLING A GEARBOX BRAKE

Title (de)

VERFAHREN ZUR STEUERUNG EINER GETRIEBEBREMSE

Title (fr)

PROCÉDÉ DE COMMANDE D'UN FREIN D'ENGRENAGE

Publication

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Application

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Abstract (en)

[origin: WO2011110399A1] The invention relates to a method for controlling a gearbox brake (1) of an automated transmission which is of a layshaft design and is provided with dog clutches, which gearbox brake (1) is operatively connected to an input-side transmission shaft and can be activated hydraulically or pneumatically by means of an inlet valve (13) and an outlet valve (15), which are each embodied as a 2/2-way solenoid proportional valve, wherein, when shifting up from a load gearspeed into a target gearspeed, after the load gearspeed has been disengaged in order to synchronize the target gearspeed the inlet valve (13) is initially opened, and after a shifting rotational speed (n_u) has been reached the inlet valve (13) is closed, and the outlet valve (15) is opened in order to switch off the gearbox brake (1) in such a way that the input rotational speed (n_E) reaches a predefined synchronizing rotational speed (n_{Sync}) at the end of the switching process ($n_E = n_{Sync}$). According to the invention, the control properties of the solenoid proportional valves (13, 15) which are provided are utilized and the duration of the synchronizing processes are harmonized and their quality improved with relatively little expenditure by virtue of the fact that at least the outlet valve (15) is opened in a controlled fashion as a function of the difference in rotational speed ($?n = n_A - n_E$) between the input rotational speed (n_E) and an output rotational speed (n_A).

IPC 8 full level

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