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(54) **METHOD FOR AUTOMATICALLY CONTROLLING THE GEAR RATIO OF A TRANSMISSION OF A VEHICLE, CONTROL SYSTEM, VEHICLE AND COMPUTER PROGRAM FOR CARRYING OUT SUCH METHOD**

(57) The method according to the invention, for automatically controlling the gear ratio of a transmission (1, 1') of a vehicle such as a wheel loader, comprises the step of determining the disturbance torque fraction (T_{ext}) of the load torque applied to the first input shaft (3) at a predetermined instant (i) on the basis of the rotational speed (n_{eng}) of the first input shaft (3) and of

one or more of the following quantities: A) the torque (T_{eng}) applied to the engine shaft or to the first input shaft (3) by the primary engine (29); B) the torque (T_c) applied at least to the first output shaft (19); C) the rotational inertia of the primary engine (J_{eng}) reduced to the first input shaft (3); D) the rotational inertia (J_{htv}) of the transmission (1) reduced to the first input shaft (3).

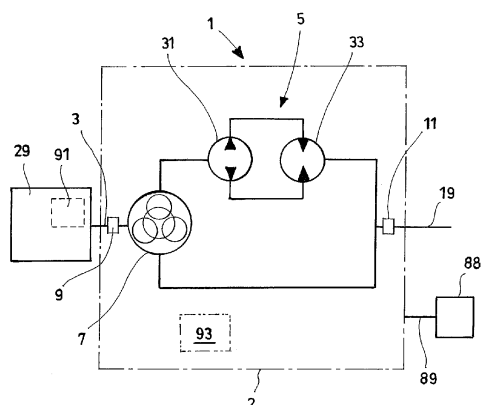


Fig.1

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