

Title (en)
CHAIN DRIVE WITH VARIABLE TRANSMISSION RATIO

Title (de)
KETTENANTRIEB MIT VARIABLEM ÜBERSETZUNGSVERHÄLTNIS

Title (fr)
ENTRAÎNEMENT PAR CHAÎNE A RAPPORT DE TRANSMISSION VARIABLE

Publication
EP 0877700 A1 19981118 (DE)

Application
EP 97913070 A 19971127

Priority
• CH 9700445 W 19971127
• CH 292796 A 19961128

Abstract (en)
[origin: WO9823481A1] The chain drive has toothed quadrants (2) which form a variable tooth wheel for pulling a plate link chain (1), and which are arranged, radially displaceable, in guideways (6) of at least one guide plate (3), and are connected with a primary shaft (7) via at least one flexible or rigid draw member (40). A rotation of the primary shaft (7) in relation to the guide plate (3), leading to an automatic and continuous change of the transmission ratio and/or to a change of the radial position of the toothed quadrants (2), is opposed by at least a first elastic element (41). The toothed quadrants (2) have a guiding part (20) and a toothed ring (10) which is displaceably stored therein tangentially to the variable tooth wheel, and which is held between two limit stops (23) by at least a second elastic element (24), thus enabling its synchronisation with the plate link chain (1). The chain drive enables the automatic, continuous adaptation of the transmission ratio to the available rotation torque, while still guaranteeing the synchronous meshing of each toothed ring (10) into the plate link chain (1).

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