Title (en)

Rotary drive for the reed support of a loom

Title (de)

Drehantrieb für die Webblattstütze einer Webmaschine

Title (fr)

Entraînement rotatif pour le support du peigne d'un métier à tisser

Publication

EP 1152077 B1 20050713 (DE)

Application

EP 01109814 A 20010421

Priority

DE 10021520 A 20000503

Abstract (en)

[origin: EP1152077A2] The rotary drive for the reed support, at a loom, has the reed support shaft (4) as a component part of the electromotor (1) direct rotary drive system. It has a stator and, selectively, an inner rotor or an outer rotor. The reed support shaft is keyed against rotation in the loom, to form the stator of the drive. The outer rotor is formed by a carrier (7) of the reed support (2) around the stator. The reed support shaft can form the inner rotor, with a keyed bond to at least one support for the reed (3). The stator can have a component which grips around the inner rotor at least partially, carried in a keyed mounting at the loom. The direct rotary drive can rotate in both directions. The reed support shaft can be a component part of an electromagnetic linear direct drive. The reed support shaft is held in a keyed fit at suitable points across the loom, so that at least one reed support is a permanent magnet secondary component of a linear drive with parallel coil primary components held by a suitable loom section, in a force fit with the reed support shaft. The reed support shaft can be held in rotary mountings at suitable points, to rotate around its longitudinal axis (4A). At least one reed support is a primary component of the linear drive and is linked to the reed support shaft, Secondary components, parallel to the primary components, are at the fixed section. At least one reed support is a double-sided secondary component. Each secondary component has an associated primary component. The direction of the linear drive is reversible. The primary and secondary components, together, can form a disk armature motor. A number of direct rotary or linear drives are deployed across the loom width, composed of identical component groups for each type. At least one motor is fitted with a resolver. One drive can be used for a forward movement, and another drive for a reverse movement of the reed support, or the drives give a reciprocating to and fro movement to the reed.

IPC 1-7

D03D 49/60

IPC 8 full level

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CPC (source: EP US)

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Cited by

EP1310588A3; ITMI20130020A1; EP2754741A1; CN102257197A; EP2379784A4; US6913044B2; WO2014044308A1

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