

Title (en)

Method and apparatus for contactless energy and signal transfer in textile machines, in particular in twisting machines

Title (de)

Verfahren zur berührungslosen Energie- und Signalübertragung an Textilmaschinen, insbesondere Zwirnmaschinen sowie Einrichtung zur Durchführung des Verfahrens

Title (fr)

Procédé et appareil pour le transfert sans contact d'énergie et de signal dans des machines textiles, en particulier dans des machines de retordage

Publication

EP 0897999 B1 20030219 (DE)

Application

EP 98110384 A 19980606

Priority

DE 19735651 A 19970816

Abstract (en)

[origin: DE19735651C1] The transformer has only one pair of coils for a common carrier signal to take the energy and signals. The carrier signal itself, is the energy carrier, and the carried signals are formed by frequency modulation imposed on the carrier. The carrier signal jumps between two frequency values, at a set gap apart, and frequency jumps are evaluated as bit-serial signals on a secondary side, to generate the control signals. Also claimed is an appts. where the two cores (6.12,6.22) of the transformer are structured for their opposing sides to match the contour and especially the curvature radius of the air gap (9), and particularly at the opposing end surfaces of their legs. The gap between the two legs of each core (6.12,6.22) is larger than the width of the air gap (9) by a multiple of it.

IPC 1-7

D01H 13/10

IPC 8 full level

H01F 38/14 (2006.01); **B65H 63/00** (2006.01); **B65H 63/028** (2006.01); **B65H 63/036** (2006.01); **D01H 1/20** (2006.01); **D01H 7/86** (2006.01); **D01H 13/14** (2006.01); **G08B 1/08** (2006.01)

CPC (source: EP US)

D01H 1/20 (2013.01 - EP US); **D01H 7/86** (2013.01 - EP US)

Cited by

DE102014108871A1; US9823102B2

Designated contracting state (EPC)

CH FR GB IT LI

DOCDB simple family (publication)

DE 19735651 C1 19980820; CN 1214523 A 19990421; CZ 261198 A3 19990217; EP 0897999 A2 19990224; EP 0897999 A3 20000503; EP 0897999 B1 20030219; JP H11176674 A 19990702; US 6047535 A 20000411

DOCDB simple family (application)

DE 19735651 A 19970816; CN 98118352 A 19980814; CZ 261198 A 19980817; EP 98110384 A 19980606; JP 23063898 A 19980817; US 13547698 A 19980817