

Title (en)

Device for monitoring yarn webs in knitting, weaving or warp preparation machines

Title (de)

Anlage zur Überwachung von Fadenscharen in Wirk-, Web- oder Kettvorbereitungsmaschinen

Title (fr)

Dispositif pour contrôler des nappes de fils dans des machines à tricoter, à tisser ou à préparer le chaîne

Publication

**EP 1041184 A2 20001004 (DE)**

Application

**EP 00105989 A 20000327**

Priority

DE 19914478 A 19990330

Abstract (en)

The assembly to monitor bands of warp yarns has at least two lasers (L1-L4) with their light beams (44,46,48,50) aligned at least at two receivers (E1-E4). The lasers (L1-L4) are controlled by signals through a common line (42), separately from the receivers (E1-E4) and/or the receivers (E1-E4) transmit their signals through a common line (52) separate from the lasers. All the lasers (L1-L4) are controlled by signals through a common line (42), and all the receivers (E1-E4) transmit their signals through a common and separate line (52). The signals are coded to control a laser and the transmitted signals from a receiver. The laser or receiver is controlled through a timing pulse signal, where the control signals for the separate lasers or receivers are coded in a set time sequence in the timing pulse signal. At the end of the common line, the timing pulse signal is passed to an active distribution unit, to be passed to the different lasers (L1-L4). The lasers (L1-L4) and/or receivers (E1-E4) are switched series. Their control and/or transmitted signals each pass through delay or signal processing units for signal modification. Two lasers can be controlled through one line, and two further lasers through a second line, with a timed cycle alternation between two lines. The receivers, in pairs, pass their transmitted signals through two lines with a common line for each pair. The laser beam, at each laser, is divided optically into at least two part-beams. In an assembly with two lasers, each delivering a laser to two facing receivers, the lasers are at different gaps from the band of warps.

Abstract (de)

Bei einer Anlage zur Überwachung von Fadenscharen in Wirk-, Web- oder Kettvorbereitungsmaschinen mit mindestens zwei je einen Laserstrahl aussendenden Lasern (L1, L2, L3, L4) und mindestens zwei Empfängern (E1, E2, E3, E4), auf denen jeweils ein Laserstrahl (44, 46, 48, 50) auftrifft, werden die Laser (L1, L2, L3, L4) durch Ansteuersignale über ein gemeinsames, von den Empfängern getrenntes Kabel (42) angesteuert, oder die Empfänger (E1, E2, E3, E4) geben Ausgabesignale über ein gemeinsames, von den Lasern getrenntes Kabel (52) ab. <IMAGE>

IPC 1-7

**D04B 35/16**; **D03D 51/28**; **D02H 13/08**

IPC 8 full level

**D02H 13/08** (2006.01); **D03D 51/28** (2006.01); **D04B 35/16** (2006.01)

CPC (source: EP)

**D02H 13/08** (2013.01); **D03D 51/28** (2013.01); **D04B 35/16** (2013.01)

Cited by

CN103046221A; CN104233539A; CN103046222A

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**EP 1041184 A2 20001004**; **EP 1041184 A3 20040114**; DE 19914478 A1 20001019

DOCDB simple family (application)

**EP 00105989 A 20000327**; DE 19914478 A 19990330