

Title (en)

Weft detecting optical device, and weft feeder including said device.

Title (de)

Vorrichtung zur optischen Detektion eines Schussfadens und diese Vorrichtung umfassender Schussfadenspeicher.

Title (fr)

Dispositif de détection optique de fil de trame et fournisseur de trame pourvu d'un tel dispositif.

Publication

EP 0624674 A1 19941117 (EN)

Application

EP 94107218 A 19940509

Priority

IT TO930323 A 19930510

Abstract (en)

The device comprises an emitter diode (17) and a receiver phototransistor (18) which are arranged at the same face of a transparent plate (19) associated with the drum (11) of the weft feeder (10) and suitable to receive the turns of the weft reserve (RF). The emitter (17) directs onto the transparent plate (19) a beam of rays (R1) which is tilted at a preset angle of incidence (α), and the receiver (18) receives a beam of rays (R2) that emerge from the transparent plate (19) and form an angle of reflection (β), with respect to the plate, which is different from the angle of incidence (α) produced by multiple-reflection means (20) located at the other face of the transparent plate (19). The incident rays (R1) and/or the emerging rays (R2) are interrupted by a turn (SP) of the reserve of thread (RF) when the turn reaches the plate (19), so as to screen the receiver (18) from the light; the receiver emits a corresponding turn presence signal (s). <IMAGE>

IPC 1-7

D03D 47/34; **B65H 63/032**

IPC 8 full level

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CPC (source: EP)

B65H 63/0324 (2013.01); **D03D 47/367** (2013.01); **B65H 2701/31** (2013.01)

Citation (search report)

- [A] EP 0327973 A1 19890816 - ROY ELECTROTEX SPA [IT]
- [A] EP 0199059 A1 19861029 - ROY ELECTROTEX SPA [IT]
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CN1088680C; EP0873961A3; WO9846511A1

Designated contracting state (EPC)

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