

Title (en)  
OPTICAL DEVICE FOR THE DETECTION OF SHORT WEFTS IN A WEAVING MACHINE

Title (de)  
OPTISCHE VORRICHTUNG ZUM ERFASSEN VON KURZEN SCHUSSFÄDEN IN EINER WEBMASCHINE

Title (fr)  
DISPOSITIF OPTIQUE POUR LA DÉTECTION DE TRAMES COURTES DANS UNE MACHINE À TISSER

Publication  
**EP 3587639 A1 20200101 (EN)**

Application  
**EP 19182502 A 20190626**

Priority  
IT 201800006835 A 20180629

Abstract (en)  
An optical device for the detection of short wefts in a weaving machine of the type wherein weft threads (T) are subsequently inserted into the shed formed between warp threads, and hence beaten by a reed (R) against the fabric being formed (C), and wherein a weaving machine control system halts the weaving machine operation when it receives a signal corresponding to the absence of the weft thread in at least one predefined weft thread detection position, includes: a. at least one base optical unit, provided with an optical transmitter and an optical receiver, and a processing unit; b. at least one corresponding optical fibre sensor comprising two prongs (1t, 1b) supporting respective optical fibres (3, 4), each one housed in an own seat; c. a processing unit of said detected signal which verifies the presence/absence of the weft thread.

IPC 8 full level  
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**D03D 47/30** (2013.01 - EP); **D03D 47/3073** (2013.01 - EP); **D03D 51/34** (2013.01 - CN)

Citation (search report)  
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• [Y] US 3907440 A 19750923 - EICHENBERGER WERNER, et al  
• [A] JP S60199950 A 19851009 - NISSAN MOTOR  
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• [A] US 5063973 A 19911112 - KITAMURA SATORU [JP], et al  
• [A] WO 9930108 A1 19990617 - SCIENT TECHNOLOGIES INC [US]

Designated contracting state (EPC)  
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