

Title (en)

Process and device for the provision of bobbins to looms in a weaving mill.

Title (de)

Verfahren und Vorrichtung für die Spulenversorgung von Webmaschinen in einer Weberei.

Title (fr)

Méthode et dispositif pour l'approvisionnement en bobines de machines à tisser dans un atelier de tissage.

Publication

EP 0459553 A1 19911204 (FR)

Application

EP 91201079 A 19910506

Priority

BE 9000551 A 19900528

Abstract (en)

To maintain a supply of bobbins to the looms in a weaving mill, a number of bobbins are held in reserve to be carried to the looms. A time interval is calculated for each loom for the consumption of each type of weft yarn. The supply system is controlled to serve each loom with fresh bobbins according to the calculated time function. The time interval is calculated for each yarn supply channel to give at least the length of reserve yarn available in the supply channel and the mean consumption time of each type of weft. The mean consumption rate is determined through the weft insertion action, and the amount of reserve yarn at the various bobbins is taken from the number of weft insertions and the number of windings round the loom feed drums since those bobbins were delivered. A sensor identifies the weft bobbins and registers when a new bobbin is taken into use. A further sensor gives a direct measurement of the amount of yarn on the bobbins. The amount of yarn reserve is taken throughout the resupply, taking the calculated time interval into account. The calculations are ignored in the case of a loom (1) which has working times which require resupply at a different rate from the other.

Abstract (fr)

Méthode pour l'approvisionnement en bobines de machines à tisser dans un atelier de tissage, et plus particulièrement dans un atelier de tissage utilisant un certain nombre de bobines (3C) en réserve et des moyens (4) pour acheminer ces bobines (3C) vers les machines à tisser (1), caractérisée par le fait que la méthode consiste pour l'essentiel à déterminer pour chaque machine à tisser (1) une valeur qui soit représentative de l'intervalle de temps (T1) durant lequel chaque type de fil de trame (18A, 18B, 18C, 18D, 18E) nécessaire à l'exécution du tissage en cours est encore disponible et à commander les moyens (4) assurant l'acheminement des bobines (3C) en fonction des valeurs mentionnées.

IPC 1-7

D03J 1/00

IPC 8 full level

B65H 63/08 (2006.01); **D03J 1/00** (2006.01)

CPC (source: EP)

B65H 63/086 (2013.01); **D03J 1/00** (2013.01); **B65H 2701/31** (2013.01)

Citation (search report)

- [A] FR 2618167 A1 19890120 - TOKAI IND SEWING MACHINE [JP]
- [A] EP 0360054 A1 19900328 - SCHLAFHORST & CO W [DE]
- [A] DE 3614654 A1 19871105 - PROLOGISTIK GES FUER INFORMATI [DE], et al
- [A] DE 905312 C 19540301 - FRANZ CZERNILOFSKY ING
- [A] BE 903191 A 19860306 - PICANOL NV
- [A] DE 3828730 A1 19890316 - TOYODA AUTOMATIC LOOM WORKS [JP]
- [A] US 4195292 A 19800325 - PUHICH JOSEPH M [US]
- [A] US 3928752 A 19751223 - DARWIN FRANK S

Cited by

ITMI20111252A1; CN103339530A; EP0500389A1; US5238098A; CN110528135A; US8736833B2; WO2013005087A1

Designated contracting state (EPC)

CH DE FR GB IT LI

DOCDB simple family (publication)

EP 0459553 A1 19911204; BE 1004346 A3 19921103

DOCDB simple family (application)

EP 91201079 A 19910506; BE 9000551 A 19900528