

Title (en)

Rotary dobby, weaving loom comprising such a dobby and method of controlling such a dobby

Title (de)

Rotationsschaftmaschine, eine solche Schaftmaschine umfassende Webmaschine und Verfahren zur Steuerung einer solchen Schaftmaschine

Title (fr)

Ratière rotative, métier à tisser comprenant une telle ratière et procédé de commande d'une telle ratière

Publication

EP 1845181 A1 20071017 (FR)

Application

EP 07356044 A 20070410

Priority

FR 0603203 A 20060411

Abstract (en)

In a dobby with two controlled bolts (10, 11) for rotationally coupling a drive (8) and an actuator (4), where a spring (19) forces the bolts into a configuration in which the bearing surfaces (103, 113) engage drive surfaces (84A, 84B) and controllers (13, 14) displace the bolts against the spring, the spring operates directly and indirectly on the first and second bolts respectively. The controllers displace the first bolt against the spring, while the second remains in engagement configuration. A rotary dobby has (for each plate) an oscillating part coupled with a warp frame, associated with an actuator (4) loosely mounted on the main shaft (1) of the ratière; a drive fixed to the shaft; and two controlled bolts (10, 11) for rotationally coupling a drive (8) and the actuator, each mounted on the actuator. The first bolt (10) has a first surface (103) bearing selectively against first drive surface(s) (84A), forming a motive force transmission interface between the drive and actuator; and the second bolt (11) has a second surface (113) bearing selectively against second drive surface(s) (84B), forming a transmission interface for received force from the actuator to the drive. A first spring (19) forces the bolts toward an engagement configuration in which their bearing surfaces (103, 113) engage the drive surfaces. Controllers (13, 14) displace the bolts against the action of the spring. The novel features are that the spring operates directly and indirectly on the first and second bolts respectively; and the controllers displace the first bolt against the action of the spring, while the second bolt remains in the engagement configuration. Independent claims are included for: (1) a corresponding method for controlling a rotary dobby; (2) a weaving loom equipped with the dobby; and (3) a sub-assembly for a dobby, comprising an eccentric actuating element (4), a rod mounted on the actuator and a pivoting arm for connecting the rod with a warp frame.

Abstract (fr)

Cette ratière comprend deux verrous commandés (10, 11) d'accouplement en rotation d'un élément d'entraînement (8) et d'un élément d'actionnement (4). Des premiers moyens (19) permettent de charger élastiquement (F 19) les verrous (10, 11) chacun vers une configuration d'engagement de leur surface d'appui respective (103, 113) avec une surface correspondante (84A, 84B) de l'élément d'actionnement (8). Des moyens de commande (13, 14) sont prévus pour déplacer les verrous à l'encontre de l'action des moyens de charge élastique (19) qui agissent directement sur le premier verrou (10) et indirectement sur le second verrou (11). Les moyens de commande peuvent déplacer (C 14) le premier verrou (10) à l'encontre des moyens de charge élastique (19), alors que le second verrou demeure en configuration d'engagement de sa surface d'appui (113) avec la seconde surface (84B) de l'élément d'actionnement (8).

IPC 8 full level

D03C 1/00 (2006.01)

CPC (source: EP KR US)

D03C 1/00 (2013.01 - EP KR US); **D03C 1/14** (2013.01 - KR); **D03C 1/16** (2013.01 - KR); **Y10T 292/1082** (2015.04 - EP US)

Citation (search report)

- [AD] EP 1111106 A1 20010627 - STAUBLI SA ETS [FR]
- [A] FR 2757882 A1 19980703 - STAUBLI SA ETS [FR]
- [A] EP 0607632 A1 19940727 - BURIGANA LUCIO [IT]
- [A] EP 0185780 A1 19860702 - STAEUBLI AG [CH]

Cited by

EP3556920A1; FR3080118A1; CN110387624A; KR20190120721A; EP2460918A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

EP 1845181 A1 20071017; EP 1845181 B1 20091111; AT E448339 T1 20091115; BR PI0702003 A 20071211; BR PI0702003 B1 20161121; BR PI0702003 B8 20170516; CN 101054748 A 20071017; CN 101054748 B 20111005; DE 602007003130 D1 20091224; FR 2899602 A1 20071012; FR 2899602 B1 20080523; JP 2007277799 A 20071025; JP 4922811 B2 20120425; KR 101431647 B1 20140820; KR 20070101138 A 20071016; RU 2007113375 A 20081110; RU 2419693 C2 20110527; US 2007246950 A1 20071025; US 7980274 B2 20110719

DOCDB simple family (application)

EP 07356044 A 20070410; AT 07356044 T 20070410; BR PI0702003 A 20070410; CN 200710095849 A 20070410; DE 602007003130 T 20070410; FR 0603203 A 20060411; JP 2007102279 A 20070410; KR 20070034680 A 20070409; RU 2007113375 A 20070410; US 78338107 A 20070409