

Title (en)
Automatic winder

Title (de)
Spulautomat

Title (fr)
Bobinoir automatique

Publication
EP 1475341 A2 20041110 (EN)

Application
EP 04007589 A 20040329

Priority
JP 2003123679 A 20030428

Abstract (en)

The present invention improves the shape of a yarn path to reduce the load on a yarn to increase a winding speed, while still preventing the tension breakage of the yarn and an increase in the amount of fluffs. An automatic winder includes a magazine type bobbin housing device 20, a holding device 3 for yarn supplying bobbins 4, and a bobbin chute 24 that guides a bobbin 4 falling from the bobbin housing device 20 to the holding device 3. The holding device 3 is provided with a first pawl 31 and a second pawl 32 which operate as holding means for the bobbins 4 and rotative moving shafts 33 and 34 which rotatively move both pawls 31 and 32. A bottom guide 24b of the bobbin chute 24 is adapted to be pivotable with respect to a main body 24a. Accordingly, when the bobbin chute 24 is closed, a path is formed through which the falling bobbin 4 is guided. Rotatively moved positions of the first pawl 31 include a position at which the first pawl 31 receives the bobbin 4 from the bobbin housing device 20, a position at which the first pawl 31 holds the bobbin during a winding operation, and a position at which the first pawl 31 discharges the bobbin to a side of a frame 2 (Fig. 1). <IMAGE>

IPC 1-7
B65H 67/02; B65H 49/06

IPC 8 full level
B65H 49/06 (2006.01); **B65H 54/22** (2006.01); **B65H 54/54** (2006.01); **B65H 67/02** (2006.01); **B65H 67/04** (2006.01)

CPC (source: EP)
B65H 49/06 (2013.01); **B65H 67/02** (2013.01); **B65H 2701/31** (2013.01)

Cited by
EP2014596A3; CN102633159A; DE102004045747A1; DE102005028760A1; CN101927919A; CN103010736A; CN102275775A; EP2388225A3; CN102275773A; EP2388223A3; CN111392504A

Designated contracting state (EPC)
DE IT

DOCDB simple family (publication)
EP 1475341 A2 20041110; EP 1475341 A3 20050622; EP 1475341 B1 20080423; DE 602004013215 D1 20080605;
DE 602004013215 T2 20090514; JP 2004323219 A 20041118; JP 3757950 B2 20060322

DOCDB simple family (application)
EP 04007589 A 20040329; DE 602004013215 T 20040329; JP 2003123679 A 20030428