

Title (en)
Winding device.

Title (de)
Wickelvorrichtung.

Title (fr)
Dispositif d'enroulage.

Publication
EP 0573953 A3 19950628 (DE)

Application
EP 93109185 A 19930608

Priority
• DE 4219261 A 19920612
• US 7386093 A 19930608

Abstract (en)
[origin: EP0573953A2] A winding device, especially for conical bobbins, is proposed, a rotatable friction roller setting a bobbin in rotation as a result of friction being proposed. The friction roller consists of a plurality of rotatable elements which are arranged next to one another and which are located on a shaft. One of the elements is connected fixedly in terms of rotation to the shaft, whilst the remaining elements of the friction roller are freely rotatable on the shaft and are connected to one another by means of a differential gear. The differential is designed as a friction-wheel gear. The axes of the friction-wheel gear are perpendicular to the shaft. <IMAGE>

IPC 1-7
B65H 54/42

IPC 8 full level
B65H 54/02 (2006.01); **B65H 54/42** (2006.01); **B65H 54/46** (2006.01); **B65H 54/50** (2006.01)

CPC (source: EP US)
B65H 54/42 (2013.01 - EP US); **B65H 54/46** (2013.01 - EP US); **B65H 2301/531** (2013.01 - EP US); **B65H 2407/51** (2013.01 - EP US); **B65H 2701/31** (2013.01 - EP US)

Citation (search report)
• [XY] EP 0230943 A1 19870805 - RIETER AG MASCHF [CH]
• [YDAD] DE 3823403 A1 19900111 - SCHLAFHORST & CO W [DE]
• [A] DE 3446259 A1 19860619 - SCHLAFHORST & CO W [DE]
• [AD] DE 3616406 A1 19880211 - SCHLAFHORST & CO W [DE]
• [AD] CS 261950 B1 19890210 - VAJDA ANDREJ [CS]
• [PAD] DE 4040650 A1 19920625 - SCHLAFHORST & CO W [DE]

Cited by
CN103282294A; US9403652B2; US10239719B2

Designated contracting state (EPC)
CH DE GB IT LI

DOCDB simple family (publication)
EP 0573953 A2 19931215; EP 0573953 A3 19950628; EP 0573953 B1 19980422; CZ 113293 A3 19940119; CZ 283770 B6 19980617; DE 4319031 A1 19931216; DE 4319031 C2 19960530; JP 3431664 B2 20030728; JP H06293469 A 19941021; US 5441207 A 19950815

DOCDB simple family (application)
EP 93109185 A 19930608; CZ 113293 A 19930610; DE 4319031 A 19930608; JP 14234493 A 19930614; US 7386093 A 19930608