

Title (en)
REELING APPARATUS

Publication
EP 0178458 A3 19870121 (DE)

Application
EP 85111507 A 19850911

Priority
DE 3438179 A 19841018

Abstract (en)
[origin: US4674701A] A winding apparatus is proposed enabling a substantially automatic winding on and removal of different winding material on to a two-part winding head. The winding head comprises a first swivellable side flange driven by a stepping motor. The second side flange can be axially displaced and on removal from the first side flange leads to the tapering of the free end of the winding core, so that winding material can be ejected by swivelling the first side flange.

IPC 1-7
B65H 54/58; **B65H 75/22**

IPC 8 full level
B65H 54/58 (2006.01); **B65H 75/22** (2006.01)

CPC (source: EP US)
B65H 54/58 (2013.01 - EP US); **B65H 75/2209** (2021.05 - EP US); **B65H 2701/515** (2013.01 - EP US)

Citation (search report)

- [A] US 4026483 A 19770531 - SKALLEBERG OYSTEIN GUNNAR
- [A] US 872826 A 19071203 - LANDON JED N [US]
- [A] US 760323 A 19040517 - EDWARDS VICTOR E [US]
- [A] US 800579 A 19050926 - HORTON JAMES A [US]
- [A] US 3236465 A 19660222 - HANSCOM HARRIS F
- [A] GB 105682 A
- [A] GB 1102770 A 19680207 - JOSEPH ALPHONSUS MARIA DE BRUY
- [A] US 4483490 A 19841120 - ENGMANN GUENTHER [DE], et al
- [A] DE 2431515 B2 19790111
- [A] DD 158540 A1 19830119 - GRUNER WILFRIED, et al
- [A] US 1461736 A 19230717 - PRENTISS WILLIAM A
- [A] US 4310126 A 19820112 - NORLEEN KENNETH V

Cited by
CN103950774A; EP0554230A3; ES2067349A2

Designated contracting state (EPC)
FR GB IT

DOCDB simple family (publication)
EP 0178458 A2 19860423; **EP 0178458 A3 19870121**; **EP 0178458 B1 19890809**; DE 3438179 A1 19860430; DE 3438179 C2 19891102; US 4674701 A 19870623

DOCDB simple family (application)
EP 85111507 A 19850911; DE 3438179 A 19841018; US 78044385 A 19850926