

Title (en)
LOADING OR UNLOADING APPARATUS FOR A SPOOL ON A WINDING MACHINE

Publication
EP 0214091 A3 19880323 (FR)

Application
EP 86810341 A 19860729

Priority
CH 369285 A 19850828

Abstract (en)
[origin: US4718817A] The drums to be loaded or unloaded are placed on a carriage borne by rollers and comprising telescopic arms. The carriage is guided along an arcuate path by a rigid arm and a pivot pin situated at the end of a bar supported by a base. A motor is provided on the carriage to drive the carriage in the arcuate path.

IPC 1-7
B65H 67/04; **B65H 54/72**

IPC 8 full level
B65H 67/02 (2006.01); **B65H 18/06** (2006.01); **B65H 54/72** (2006.01); **B65H 67/04** (2006.01)

CPC (source: EP US)
B65H 54/72 (2013.01 - EP US); **B65H 67/04** (2013.01 - EP US); **Y10S 414/124** (2013.01 - EP US)

Citation (search report)
• [A] US 2650771 A 19530901 - MARION KENNETH O
• [A] FR 2482570 A1 19811120 - NIEHOFF KG MASCHF [DE]
• [A] DE 2748155 A1 19790503 - KABEL & LACKDRAHTFAB GMBH
• [A] DE 2752817 B1 19790329 - ROSENDAHL IND HANDELS AG
• [A] FR 1243360 A 19601007 - BARRON & CROWTHER LTD
• [A] FR 2376811 A1 19780804 - BEKAERT SA NV [BE]

Cited by
EP0261077A1; US4781335A; EP0430913A1

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)
EP 0214091 A2 19870311; **EP 0214091 A3 19880323**; FI 80868 B 19900430; FI 80868 C 19900810; FI 863336 A0 19860818; FI 863336 A 19870301; JP S6357479 A 19880312; US 4718817 A 19880112

DOCDB simple family (application)
EP 86810341 A 19860729; FI 863336 A 19860818; JP 20121786 A 19860827; US 89326086 A 19860805