

Title (en)

PROCESS AND APPARATUS FOR WINDING SPIRAL ELEMENTS FROM ELASTIC, SYNTHETIC OR METAL THREADS

Publication

**EP 0128239 B1 19890322 (DE)**

Application

**EP 83110109 A 19831011**

Priority

DE 3315417 A 19830428

Abstract (en)

[origin: US4599881A] In a method and an arrangement for winding and forming helixes of elastic synthetic plastic and metal wire the wire is supplied from a wire supply device, windings are then wound from the wire so as to form straight winding legs connected by head curves, the windings are then separated to provide distances therebetween, the separated windings are widened in correspondence with the distances between them produced during the separation and the finished helixes are supplied to a helix supply device.

IPC 1-7

**B21F 3/02**; **D21F 1/10**; **D21F 1/00**

IPC 8 full level

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CPC (source: EP US)

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Cited by

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DOCDB simple family (publication)

**US 4599881 A 19860715**; AT E41615 T1 19890415; CA 1222116 A 19870526; DE 3315417 C1 19841004; EP 0128239 A2 19841219; EP 0128239 A3 19850502; EP 0128239 B1 19890322; JP S6073832 A 19850426; PT 78506 A 19840501; PT 78506 B 19860528

DOCDB simple family (application)

**US 60241384 A 19840420**; AT 83110109 T 19831011; CA 452848 A 19840426; DE 3315417 A 19830428; EP 83110109 A 19831011; JP 8520184 A 19840428; PT 7850684 A 19840427