

Publication

EP 0825033 A3 19980304

Application

EP 97113537 A 19970806

Priority

DE 19632894 A 19960816

Abstract (en)

[origin: US5941289A] An apparatus for converting a length of metallic or other wire into a series of successive helical wire binders and for threading successive binders into rows of holes in the spines of successive stacks of sheets at a binding station includes an elongated guide defining an at least substantially continuous path for the wire from a wire inserting station to the binding station. The guide includes a rotary convoluting tool at the inserting station and a stationary cylindrical worm coaxial with the tool and extending from the latter to the binding station. Successive foremost binders are threaded into the rows of holes in successive stacks at the binding station and are severed from the respective following binders by a set of knives when the threading steps are completed.

IPC 1-7

B42B 5/10; B42B 5/12

IPC 8 full level

B42F 13/16 (2006.01); **B42B 5/10** (2006.01); **B42B 5/12** (2006.01)

CPC (source: EP US)

B42B 5/123 (2013.01 - EP US)

Citation (search report)

- [XY] US 4249278 A 19810210 - PFAFFLE ERNST [DE]
- [X] US 3101750 A 19630827 - ERNST PFAFFLE
- [Y] GB 2044676 A 19801022 - MORRIS BROS LTD

Cited by

US9862221B2; US10569590B2

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

US 5941289 A 19990824; AT E208284 T1 20011115; DE 19632894 A1 19980219; DE 59705250 D1 20011213; EP 0825033 A2 19980225; EP 0825033 A3 19980304; EP 0825033 B1 20011107; ES 2165549 T3 20020316; JP 4018204 B2 20071205; JP H10114169 A 19980506

DOCDB simple family (application)

US 90289997 A 19970730; AT 97113537 T 19970806; DE 19632894 A 19960816; DE 59705250 T 19970806; EP 97113537 A 19970806; ES 97113537 T 19970806; JP 21873497 A 19970813