

Title (en)  
EXPANDING MANDREL

Title (de)  
SPANNDORN

Title (fr)  
BROCHE DE SERRAGE

Publication  
**EP 1320508 B1 20040804 (DE)**

Application  
**EP 01971699 A 20010907**

Priority  
• DE 0103443 W 20010907  
• DE 10046164 A 20000919

Abstract (en)  
[origin: WO0224563A1] The invention relates to an expanding mandrel (01) for rotationally mounting a strip material that is wound around a sleeve (09). Said mandrel comprises an ejecting device (16, 18) for stripping the sleeve from the expanding mandrel (01). The ejecting device (16, 18) comprises at least one first part (16) that is rotatably mounted about an axis together with the sleeve (09) and a non-rotatably mounted second part (18), wherein the first part (16) can strip the sleeve (09) from the expanding mandrel (01) by actuating the second part (18). The second part (17) is configured in the form of a piston which can be driven a pressurized fluid.

IPC 1-7  
**B65H 19/12**

IPC 8 full level  
**B65H 19/30** (2006.01); **B65H 19/12** (2006.01); **B65H 75/24** (2006.01)

CPC (source: EP US)  
**B65H 19/12** (2013.01 - EP US); **B65H 75/243** (2013.01 - EP US); **B65H 2301/41856** (2013.01 - EP US)

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**WO 0224563 A1 20020328**; AT E272554 T1 20040815; AU 9162801 A 20020402; DE 10046164 A1 20020404; DE 10046164 B4 20040722; DE 50103145 D1 20040909; EP 1320508 A1 20030625; EP 1320508 B1 20040804; JP 2004509040 A 20040325; JP 3662240 B2 20050622; US 2004094655 A1 20040520; US 6786443 B2 20040907

DOCDB simple family (application)  
**DE 0103443 W 20010907**; AT 01971699 T 20010907; AU 9162801 A 20010907; DE 10046164 A 20000919; DE 50103145 T 20010907; EP 01971699 A 20010907; JP 2002528587 A 20010907; US 36296903 A 20030306