

Title (en)  
Lubrication mechanism for an expandable mandrel

Title (de)  
Schmiervorrichtung für einen spreizbaren Haspeldorn

Title (fr)  
Dispositif de lubrification pour un manorin expansible

Publication  
**EP 0722791 B1 19980304 (DE)**

Application  
**EP 95250297 A 19951206**

Priority  
DE 19502040 A 19950112

Abstract (en)  
[origin: EP0722791A2] The lubricating appts. is intended for an expandable strip winder mandrel with an inner shaft carrying several expander segments mounted on wedge surfaces rising in the longitudinal direction of the shaft. All lubricating points (5) are centrally lubricated by means of a single or multi-part cartridge (6a, 6b, 6c) provided with a number of longitudinal bores corresponding to the number of lubricating points. Each longitudinal bore is connected to a central lubricant distributor (12) and to annular grooves (9) leading via bores (11) - to the lubrication points.

IPC 1-7  
**B21C 47/30; B65H 75/24**

IPC 8 full level  
**B65H 18/04** (2006.01); **B21C 47/28** (2006.01); **B21C 47/30** (2006.01); **B65H 75/24** (2006.01)

CPC (source: EP US)  
**B21C 47/30** (2013.01 - EP US); **B65H 75/2437** (2021.05 - EP US); **B65H 2402/70** (2013.01 - EP US); **Y10S 242/914** (2013.01 - EP)

Cited by  
DE10347262B3; DE10347262B8; US7454937B2; WO2006103051A1

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DE FR GB IT

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**DE 19502040 A1 19960718; DE 19502040 C2 19970424**; DE 59501547 D1 19980409; EP 0722791 A2 19960724; EP 0722791 A3 19960731;  
EP 0722791 B1 19980304; JP 2623079 B2 19970625; JP H08239143 A 19960917; US 5673871 A 19971007

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**DE 19502040 A 19950112**; DE 59501547 T 19951206; EP 95250297 A 19951206; JP 2195096 A 19960112; US 58736696 A 19960116