

Title (en)  
Hollow spindle, especially for manufacturing elastic wrap yarns

Title (de)  
Hohlspindel, insbesondere zur Herstellung elastischer Umwindgarne

Title (fr)  
Broche creuse, notamment pour fabriquer des fils enroulés élastiques

Publication  
**EP 1048763 B1 20030709 (DE)**

Application  
**EP 99124592 A 19991210**

Priority  
DE 19919232 A 19990428

Abstract (en)  
[origin: US6293079B1] A hollow spindle, in particular for the manufacture of elastic twisted yarns, has a thread channel (9) extending coaxially with respect to the axis of the spindle (A), through which thread channel is axially moved a yarn (6), in particular an elastic core yarn. The thread channel (9) has ribs (10) on its inner surface (8a), which extend in peripheral direction or helically and project inwardly over the surface (8a), so that the yarn (6) running through the thread channel (9) rests only pointlike on the ribs, otherwise, however, is supported at a distance from the inner surface (8a).

IPC 1-7  
**D02G 3/32**; **D01H 13/04**

IPC 8 full level  
**D01H 7/88** (2006.01); **D01H 13/04** (2006.01); **D02G 3/32** (2006.01)

CPC (source: EP US)  
**D01H 7/88** (2013.01 - EP US); **D01H 13/045** (2013.01 - EP US); **D02G 3/322** (2013.01 - EP US)

Citation (examination)  
GB 936509 A 19630911 - BARMAG BARMER MASCHF

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
**US 6293079 B1 20010925**; AT E244783 T1 20030715; CN 1271787 A 20001101; DE 19919232 C1 20000713; DE 59906259 D1 20030814; EP 1048763 A2 20001102; EP 1048763 A3 20001227; EP 1048763 B1 20030709; TW 494149 B 20020711

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**US 55234900 A 20000419**; AT 99124592 T 19991210; CN 00108118 A 20000428; DE 19919232 A 19990428; DE 59906259 T 19991210; EP 99124592 A 19991210; TW 89106457 A 20000407