

Title (en)  
Winding of multiple filaments

Title (de)  
Wickeln von mehreren Fäden

Title (fr)  
Bobinage de plusieurs fils

Publication  
**EP 0780333 A1 19970625 (EN)**

Application  
**EP 95203536 A 19951218**

Priority  
EP 95203536 A 19951218

Abstract (en)  
An assembly for winding a plurality of elongated elements (10, 12, 14) on a single spool (22) comprises : a set of independently driveable capstans (30, 32, 34), one for each individual elongated element to be wound ; a single spool (22) where the plurality of elongated elements (10, 12, 14) are to be wound ; first monitoring means (18, 20) for measuring the tensions of each individual elongated element of a subgroup (12, 14) of said plurality of elongated elements ; first control means (48) for steering individually the revolution speed (n2, n3) of the capstans (32, 34) driving the elongated elements (12, 14) of said subgroup such that said tensions remain substantially constant and equal to each other. <IMAGE>

IPC 1-7  
**B65H 59/38**

IPC 8 full level  
**B65H 54/02** (2006.01); **B65H 59/38** (2006.01)

CPC (source: EP)  
**B65H 54/026** (2013.01); **B65H 59/38** (2013.01); **B65H 2701/38** (2013.01)

Citation (search report)  
• [XY] DE 2812100 A1 19791004 - BARMAG BARMER MASCHF  
• [YDA] US 3967787 A 19760706 - MULLEMAN CARLOS  
• [A] EP 0476880 A2 19920325 - GEN ATOMICS [US]  
• [A] FR 1549653 A 19681213

Cited by  
US6133495A; CN107667066A; FR2869329A1; CN104401791A; EP2150643A4; US7185838B2; US7802418B2; WO03076321A1; WO2005105639A1; WO2016192870A1; US10526160B2; US11313140B2

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

DOCDB simple family (publication)  
**EP 0780333 A1 19970625**

DOCDB simple family (application)  
**EP 95203536 A 19951218**