

Title (en)  
Winding apparatus for continuous threads

Title (de)  
Aufwinder Vorrichtung für Enlopfäden

Title (fr)  
Bobinoir pour fils textiles continus

Publication  
**EP 0931749 A3 20000517 (DE)**

Application  
**EP 98811174 A 19981126**

Priority  
DE 19802509 A 19980123

Abstract (en)  
[origin: EP0931749A2] The surface drive roller (2) and both bobbin holder spindles (8,10) are each driven by their own motor (40,80,100 respectively). The revolving head (6) for bobbin changing is driven by a motor (120). All the motors are speed controlled from a programmable central control unit (30) which also controls the winding pressure exerted by the swing arm (16) during the bobbin build.

IPC 1-7  
**B65H 67/048**

IPC 8 full level  
**B65H 54/44** (2006.01); **B65H 54/40** (2006.01); **B65H 54/52** (2006.01); **B65H 67/048** (2006.01)

CPC (source: EP US)  
**B65H 54/40** (2013.01 - EP US); **B65H 54/52** (2013.01 - EP US); **B65H 67/048** (2013.01 - EP US); **B65H 2701/31** (2013.01 - EP US)

Citation (search report)

- [XY] US 4765552 A 19880823 - SUGIOKA TAKAMI [JP], et al
- [YX] US 5407143 A 19950418 - NAKAI SHOJI [JP], et al
- [YDA] CH 624910 A5 19810831 - RIETER AG MASCHF [CH]
- [AY] DE 4321111 A1 19940105 - BARMAG BARMER MASCHF [DE]
- [X] US 5605294 A 19970225 - MIGAKI YOSHIRO [JP], et al
- [X] EP 0678468 A2 19951025 - TORAY ENG CO LTD [JP]
- [Y] US 4487374 A 19841211 - SUGIOKA TAKAMI [JP], et al
- [A] EP 0015410 A1 19800917 - RIETER AG MASCHF [CH]
- [X] EP 0391101 A1 19901010 - RIETER AG MASCHF [CH]
- [X] CH 577931 A5 19760730 - MITSUBISHI HEAVY IND LTD
- [PX] EP 0861800 A2 19980902 - MURATA MACHINERY LTD [JP]

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

DOCDB simple family (publication)  
**EP 0931750 A2 19990728; EP 0931750 A3 20000517**; DE 19802509 A1 19990729; DE 59813349 D1 20060406; EP 0931749 A2 19990728; EP 0931749 A3 20000517; EP 0931749 B1 20060118; JP H11255434 A 19990921; JP H11255435 A 19990921; US 6059217 A 20000509; US 6149097 A 20001121

DOCDB simple family (application)  
**EP 98811175 A 19981126**; DE 19802509 A 19980123; DE 59813349 T 19981126; EP 98811174 A 19981126; JP 1191899 A 19990120; JP 1191999 A 19990120; US 21723798 A 19981221; US 21728298 A 19981221