

Title (en)  
BOBBIN HOLDER AND YARN WINDER

Title (de)  
SPULENHALTER UND GARNWICKLER

Title (fr)  
SUPPORT DE BOBINE ET ENROULEUR DE FIL

Publication  
**EP 4311801 A1 20240131 (EN)**

Application  
**EP 23184752 A 20230711**

Priority  
JP 2022121490 A 20220729

Abstract (en)  
A bobbin holder 41 includes a holder body 61, a core member 62, and an intermediate supporter 80. The holder body 61 includes a cylindrical portion 61c and holds a plurality of bobbins 91 for winding yarn aligned in an axial direction. The core member 62 is arranged inside the cylindrical portion 61c of the holder body 61 and a first end portion and a second end portion in an axial direction of the core member 62 is supported by the holder body 61. The intermediate supporter 80 is arranged at a position which is radially inside the cylindrical portion 61c, radially outside the core member 62, and between the first end portion and the second end portion so that the holder body 61 supports the core member 62.

IPC 8 full level  
**B65H 54/54** (2006.01); **B65H 54/547** (2006.01)

CPC (source: CN EP KR)  
**B65H 54/28** (2013.01 - CN); **B65H 54/44** (2013.01 - CN); **B65H 54/543** (2013.01 - EP KR); **B65H 54/547** (2013.01 - EP);  
**B65H 54/553** (2013.01 - CN); **B65H 54/70** (2013.01 - CN); **B65H 54/72** (2013.01 - CN); **B65H 57/28** (2013.01 - CN);  
**B65H 75/2484** (2021.05 - KR); **B65H 2701/31** (2013.01 - CN EP); **B65H 2701/319** (2013.01 - KR)

Citation (applicant)  
JP 2013193819 A 20130930 - TMT MACHINERY INC

Citation (search report)  
• [X] WO 03055778 A1 20030710 - BARMAG BARMER MASCHF [DE], et al  
• [X] JP H01209278 A 19890823 - TEIJIN SEIKI CO LTD  
• [X] JP S51153386 U 19761207  
• [A] US 6536953 B1 20030325 - COPE STEVEN A [US], et al

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
**EP 4311801 A1 20240131**; CN 117466076 A 20240130; JP 2024019003 A 20240208; KR 20240016879 A 20240206

DOCDB simple family (application)  
**EP 23184752 A 20230711**; CN 202310814704 A 20230705; JP 2023109106 A 20230703; KR 20230086409 A 20230704