

Title (en)  
Bobbin holder support structure

Title (de)  
Spulenhalter

Title (fr)  
Support de bobine

Publication  
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Application  
**EP 99125429 A 19991220**

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Abstract (en)  
The present invention provides a bobbin holder support structure that allows the natural frequency of a bobbin holder to be greatly varied in order to prevent resonance over a wide range of available rotations. The present invention enables a bobbin holder 5 to be rotatably supported at two root-side positions using support members 11, 12 so that the bobbin holder 5 can be supported like a cantilever, while enabling the tip side of the bobbin holder to be rotatably supported using a detachable support member, and provides an offset absorption member 14 in a support structure comprising one 12 of the root-side support members. Consequently, with the tip of the bobbin holder 5 supported, the bobbin holder 5 is arrested and supported substantially at the two positions in a radial direction using the other root-side support member 11 and the tip-side support member 13. Interposing vibration absorption members 23, 23 are provided for a support structure comprising the other root-side support member 11. Interposing vibration absorption members 24, 24 are provided for a support structure comprising the tip-side support member 13 (Fig. 2A). <IMAGE>  
<IMAGE>

IPC 1-7  
**B65H 54/553**

IPC 8 full level  
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Cited by  
CN110697499A; CN100347361C; CN110592991A; CN102341331A; WO2016146465A1; WO2010102924A1; WO2016146464A1; EP1260475A1

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