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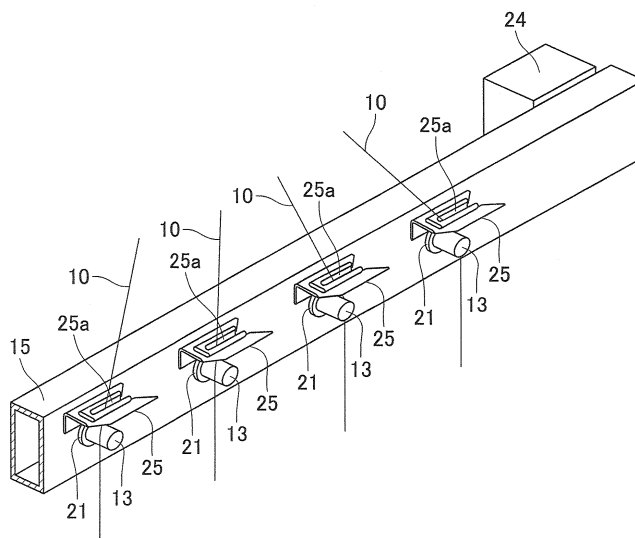
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(54) **Spinning winder**

(57) Damage on yarns is restrained while allowing the bending angles of the yarns at distribution guides by which the yarns spun out from a spinning unit are distributed to be large. Yarns 10 serially spun out and supplied from a spinning machine are conveyed to a winding unit below by two godet rollers, and in a winding unit the yarns 10 are distributed by fulcrum guides 13 and then wound onto bobbins attached to a bobbin holder. Each fulcrum guide 13 is a column having a radius of not shorter than

3mm and not longer than 8mm, and the yarn 10 is threaded on the outer circumference of the fulcrum guide 13. By rotating the fulcrum guide 13, the sliding position between the fulcrum guide 13 and the yarn 10 is changed. Furthermore, the movement of the yarn 10 threaded on the fulcrum guide 13 is restrained in the axial directions of the fulcrum guide 13, because the yarn 10 is arranged to pass through a slit 25a made through a restraining guide 25 which is provided above the fulcrum guide 13.

FIG.2





## EUROPEAN SEARCH REPORT

Application Number  
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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 3 October 2013	Examiner Pussemier, Bart
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
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