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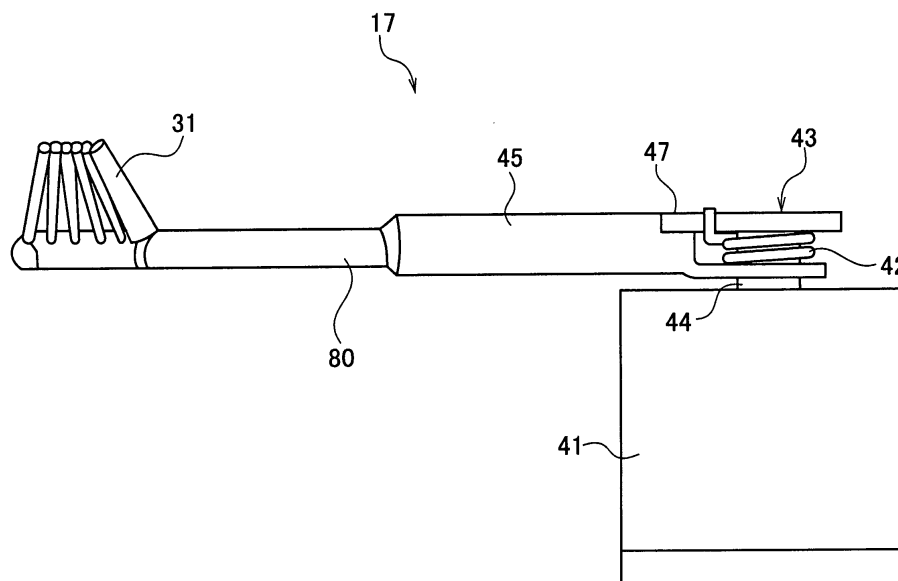
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(54) **Kink preventing device and automatic winder comprising the same**

(57) A kink preventing device (17) includes a contact portion (80) that can contact with the yarn supplying bobbin (21) and a stepping motor (41) that moves the contact portion (80). Furthermore, the kink preventing device (17) includes a pivotally moving portion (43) attached to a shaft portion (44) of the stepping motor (41), and a spring portion (42) provided between the pivotally moving por-

tion (43) and the contact portion (80). The pivotally moving portion (43) rotates integrally with the output shaft (44), to which rotation of the stepping motor (41) is transmitted. The contact portion (80) is pivotally movably attached to the shaft portion (44). The stepping motor (41) pivotally moves the pivotally moving portion (43) to allow the contact portion (80) to be pivotally moved by a biasing force of the spring portion (42).

FIGURE 3





EUROPEAN SEARCH REPORT

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EP 08 02 0337

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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 23 October 2009	Examiner Lemmen, René
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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EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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