



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
06.02.2008 Bulletin 2008/06

(51) Int Cl.:
D01H 9/10 (2006.01)

(43) Date of publication A2:
23.08.2006 Bulletin 2006/34

(21) Application number: **06000955.2**

(22) Date of filing: **17.01.2006**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated Extension States:
AL BA HR MK YU

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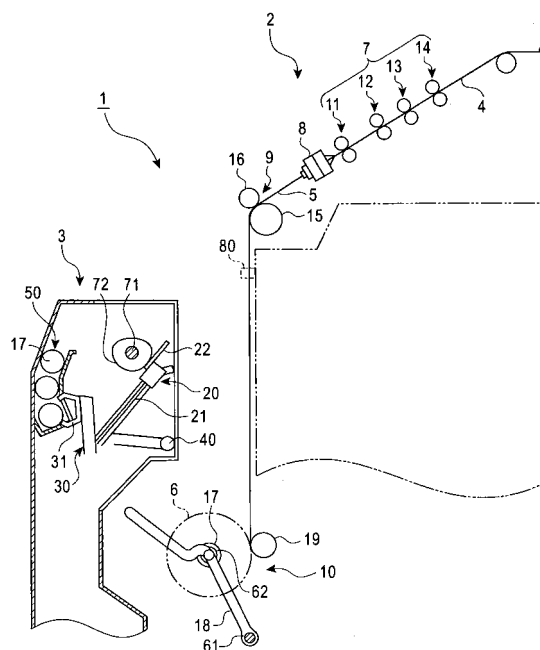
(30) Priority: **16.02.2005 JP 2005039766**

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(54) **Method for automatic doffing operation and doffing apparatus**

(57) The present invention relates to an automatic doffing operation. Conventionally if in spite of a failure in a yarn drawing-out operation, a yarn hooking operation is performed and an empty bobbin is uselessly supplied, an operator is thus forced to remove the bobbin. The present invention includes a full-package taking-out operation step of taking a bobbin (17) with a package (6) out of a cradle, a yarn drawing-out operation step of using a yarn drawing-out device (20) to start drawing out a spun yarn and then catching the spun yarn, and a yarn hooking operation step of supplying an empty bobbin (17) to the cradle and hooking the spun yarn on the bobbin (17) to return a doffing operation to an initial state. If the yarn fails to be caught during the yarn drawing-out operation step, a reverse returning step is executed instead of the yarn hooking operation step to reversely rotate a motor to return the doffing operation to its initial state without executing the yarn hooking operation step.

FIG. 1





European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 06 00 0955

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Place of search		Date of completion of the search	Examiner
The Hague		18 December 2007	Henningsen, Ole
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 (P04/C01)

**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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