

Title (en)

SPUN YARN TAKE-UP APPARATUS

Title (de)

AUFNAHMEVORRICHTUNG FÜR GESPONNENES GARN

Title (fr)

APPAREIL DE RATTRAPAGE DE FIL FIN

Publication

EP 4101799 A1 20221214 (EN)

Application

EP 22176901 A 20220602

Priority

JP 2021097322 A 20210610

Abstract (en)

In order to provide a spun yarn take-up apparatus lower in floor level than a conventional apparatus, the spun yarn take-up apparatus comprises a spun yarn take-up unit 6 for taking up and at least drawing a plurality of yarns 100 spun from a spinning machine, a plurality of yarn suctioning units 4, 4A-4L, and a spooling unit 8 for winding the plurality of yarns 100 delivered from the spun yarn take-up unit 6 to form a wound package. The spun yarn take-up unit 6 includes: a first guide section 10 for changing traveling directions of the plurality of yarns 100, respectively; a drawing section 28, 28A including a plurality of rollers 31-34, 41-44, and 51-58 having a roller for drawing the plurality of yarns 100; and a second guide section 70 for guiding the plurality of yarns 100 to the spooling unit 8. The spooling unit 8 and the drawing section 28, 28A are arranged horizontally and the first guide section 10 is arranged above at least one roller of the drawing section 28, 28A. A first yarn delivery roller 20 is provided on a yarn path from the first guide section 10 to the drawing section 28, 28A. The first yarn delivery roller 20 is arranged below the plurality of yarn suctioning sections 4, 4A-4L and separated in a horizontal direction from the first guide section 10 and the drawing section 28, 28A.

IPC 8 full level

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CPC (source: CN EP)

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Citation (applicant)

US 4966909 A

Citation (search report)

- [A] EP 1486592 A1 20041215 - SAURER GMBH & CO KG [DE]
- [A] EP 1253222 A2 20021030 - BARMAG BARMER MASCHF [DE]
- [A] EP 1300496 A1 20030409 - NEUMAG GMBH & CO KG [DE]
- [A] DE 102009021131 A1 20091203 - OERLIKON TEXTILE GMBH & CO KG [DE]

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 MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

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