

Title (en)  
TWISTING OR SPINNING MACHINE WITH MORE THAN ONE BALLOON

Title (de)  
ZWIRN- ODER SPINNMASCHINE MIT MEHR ALS EINEM BALLON

Title (fr)  
MACHINE À TORDRE OU À FILER DE PLUS D'UN BALLON

Publication  
**EP 3812492 A4 20210721 (EN)**

Application  
**EP 19807477 A 20190523**

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• ES 2019070345 W 20190523

Abstract (en)  
[origin: EP3812492A1] The invention relates to a twisting or spinning machine (1) with more than one balloon, which comprises feeding means, guiding means (5), a reel (2) with a yarn take-up diameter (Y) and a ring (10) that serves as means for twisting and tensioning the yarn, the ring (10) being placed between the feeding means and the reel (2), inside the inner zone of the balloons and concentric with the reel (2), with a diameter (Z), and moving along the axis of the reel (2) in order to distribute the yarn over same, wherein the distance between the guiding means (5) and the ring (10) is LB, wherein the diameter (Z) of the ring (10) is 1.1 to 10 times the yarn take-up diameter (Y), wherein the distance LB is at least twice the diameter of the ring (Z), and wherein the twisting or spinning machine (1) does not comprise a balloon limiter or any additional tension means. The ring (10) can be a magnetic ring or a bell.

IPC 8 full level  
**D01H 7/00** (2006.01); **D01H 1/02** (2006.01); **D01H 1/14** (2006.01); **D01H 7/60** (2006.01); **D01H 13/00** (2006.01)

CPC (source: EP ES)  
**D01H 1/02** (2013.01 - EP); **D01H 7/602** (2013.01 - EP ES)

Citation (search report)  
• [XYI] ES 2621879 A1 20170705 - TWISTPERFECT S L [ES], et al  
• [XYI] ES 2606069 A1 20170317 - TWISTPERFECT S L [ES], et al  
• [Y] US 5109659 A 19920505 - TSUZUKI KIYOHIO [US]  
• [Y] CN 101649512 A 20100217 - XINYI CHENG  
• [Y] GB 668299 A 19520312 - ONDERZOEKINGS INST RES  
• See references of WO 2019224417A1

Cited by  
EP4089213A1; WO2023186722A1; US11795585B2; WO2022243208A1

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

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DOCDB simple family (application)  
**EP 19807477 A 20190523**; CN 201980049663 A 20190523; ES 201830495 A 20180523; ES 2019070345 W 20190523