

Title (en)

AUTOMATED MACHINE FOR PRODUCING CORD CHAINS AND PROCESS FOR PRODUCING CORD CHAINS

Title (de)

AUTOMATISIERTE MASCHINE ZUR HERSTELLUNG VON KORDELKETTEN UND VERFAHREN ZUR HERSTELLUNG VON KORDELKETTEN

Title (fr)

MACHINE AUTOMATISÉE POUR LA FABRICATION DES CHÂÎNES DE CORDON ET PROCÉDÉ DE FABRICATION DES CHÂÎNES DE CORDON

Publication

EP 4129526 A1 20230208 (EN)

Application

EP 22188156 A 20220801

Priority

IT 202100020726 A 20210802

Abstract (en)

Automated machine for producing cord chains comprising a feed group (2), a chaining station (8) and a transport group (15). The feed group (2) comprises two first and two second loaders (3, 4), adapted to provide respectively first and second open rings (5, 6) having different diameters. The chaining station (8) comprises a first and a second clamp (9, 10), in order to retain respectively a first and a second ring (5, 6) of the cord chain at a chaining position, and first movement means (11), in order to place one of the two clamps (9, 10) in chaining position. In addition, the chaining station (8) comprises a first and a second rotary gripper (12, 13), in order to retain respectively a first and a second ring (5, 6) at a meshing position and rotatable in order to link the corresponding first and second ring (5, 6) to a ring of the cord chain in chaining position, and second movement means (14), in order to place one of the two rotary grippers (12, 13) in meshing position. The transport group (15) comprises two first and two second feed grippers (16, 17) and third movement means (18), in order to move the first and second feed grippers (16, 17) between a loading position, in which they respectively pick up at least one first or second ring (5, 6) from the respective first and second loaders (3, 4), and an unloading position, in which they release at least one first or second ring (5, 6) respectively at a first or second clamp (9, 10) in chaining position and to a first or second rotary gripper (12, 13) in meshing position. The invention also relates to a process for producing cord chains.

IPC 8 full level

B21L 11/00 (2006.01)

CPC (source: EP)

A44C 27/00 (2013.01); **B21K 27/02** (2013.01); **B21L 3/02** (2013.01); **B21L 11/005** (2013.01)

Citation (applicant)

IT 201500017695 A

Citation (search report)

- [A] IT UB20150791 A1 20161126
- [A] IT 201900009399 A1 20190919 - FASTI IND S P A [IT]
- [A] EP 3722020 A1 20201014 - PETTENUZZO GIANNI [IT]

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4129526 A1 20230208

DOCDB simple family (application)

EP 22188156 A 20220801