

Title (en)

METHOD AND APPARATUS FOR MAKING ORNAMENTAL CHAINS WITH CYLINDRICAL HELIX LINKS

Publication

**EP 0380452 A3 19910605 (FR)**

Application

**EP 90830009 A 19900111**

Priority

IT 932189 A 19890124

Abstract (en)

[origin: EP0380452A2] A machine is claimed for the forming of ornamental chain with cylindrical helix links, comprising: - a primary section (A) for the displacement of each free link, to a position for linking it with the corresponding link in the chain being formed, with a motorised vertical shaft carrying a horizontal support for guiding a slide block of a bank of carrying tongs, sliding horizontally between a remote, inactive position and two forward working positions, respectively for grasping the free link from a link forming machine and positioning it for linking, with a pinch for grasping the free link, that is slaved to a helicoidal advancing movement along its longitudinal axis, in order to make the linkage with the last corresp. link of the chain being formed; - a secondary section (B) for the blocking of the leading - last link of the chain being formed, with a vertical motorised hollow shaft, sliding axially and carrying a horizontal slide for a slide block provided with two distinct vices and moving in a manner suitable to position separately these vices in the blocking position for the corresp. link of the chain during its formation. The method of using this machine is also claimed.

IPC 1-7

**B21L 7/00**; **B21L 11/00**; **A44C 11/00**

IPC 8 full level

**B21L 7/00** (2006.01); **B21L 11/00** (2006.01)

CPC (source: EP US)

**B21L 7/00** (2013.01 - EP US); **B21L 11/005** (2013.01 - EP US)

Citation (search report)

- [A] DE 3334449 A1 19850411 - FISCHER & CO FICO MASCH [DE]
- [A] GB 1547584 A 19790620 - JANNE J
- [A] DE 329030 C 19201113 - KARL BOSCH JR

Designated contracting state (EPC)

CH DE ES FR GB GR LI

DOCDB simple family (publication)

**EP 0380452 A2 19900801**; **EP 0380452 A3 19910605**; **EP 0380452 B1 19931215**; DE 69005134 D1 19940127; DE 69005134 T2 19940519; ES 2049455 T3 19940416; IT 1233139 B 19920314; IT 8909321 A0 19890124; US 5092120 A 19920303

DOCDB simple family (application)

**EP 90830009 A 19900111**; DE 69005134 T 19900111; ES 90830009 T 19900111; IT 932189 A 19890124; US 46862090 A 19900123