

Title (en)

Nailing machine for assembling pallets made of wood or the like, with sliders for sets of blocks at a variable distance

Title (de)

Nagelmaschine für Paletten aus Holz oder ähnlichem Material mit Schiebern für variable Blockabstände

Title (fr)

Machine de clouage pour l'assemblage de palettes en bois ou en matériau similaire, avec des chariots pour l'ajustement de blocs à des distances variables

Publication

EP 2368679 A1 20110928 (EN)

Application

EP 11158179 A 20110315

Priority

IT MI20100498 A 20100325

Abstract (en)

A nailing machine for assembling pallets made of wood or the like, with sliders for sets of blocks at a variable distance, comprising a substantially horizontal supporting surface (5) for the blocks (54) to be assembled below a corresponding lid (51) to provide a pallet (50) and means (8) for the advancement of the blocks (54) on the supporting surface (5) along an advancement direction (9). The advancement means (8) comprise three pairs of chains (10a, 10b, 11a, 11b, 12a, 12b), which are arranged so that one of their portions is parallel to the advancement direction (9), and sliders (13, 14, 15) are connected to each one of the pairs of chains (10a, 10b, 11a, 11b, 12a, 12b), are arranged at right angles to the advancement direction (9) and are mutually spaced. Each pair of chains (10a, 10b, 11a, 11b, 12a, 12b) engages at least one corresponding pair of actuation pinions (16a, 16b, 17a, 17b, 18a, 18b), which are mutually coaxial and can be actuated with a rotary motion about their corresponding axis and with at least one pair of mutually coaxial guiding pinions. The pairs of actuation pinions (16a, 16b, 17a, 17b, 18a, 18b) are arranged coaxially on a same main shaft (19). Each pair of actuation pinions (16a, 16b, 17a, 17b, 18a, 18b) is connected to a corresponding actuation motor or gearmotor (20, 21, 22) and at least two (17a, 17b, 18a, 18b) of the pairs of actuation pinions (16a, 16b, 17a, 17b, 18a, 18b) are supported by the main shaft (19) freely about their own axis (23). The pairs of actuation pinions (16a, 16b, 17a, 17b, 18a, 18b) can be actuated with identical rotation rates about their own axis (23) for the joint advancement of the sliders (13, 14, 15) connected to the several pairs of chains (10a, 10b, 11a, 11b, 12a, 12b) along the advancement direction (9) or with different rotation rates in order to vary the distance between the sliders (13, 14, 15) connected to different pairs of chains (10a, 10b, 11a, 11b, 12a, 12b).

IPC 8 full level

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CPC (source: EP)

B27M 3/0073 (2013.01)

Citation (search report)

- [A] US 3763547 A 19731009 - BLAKESLEE D
- [A] US 4489874 A 19841225 - WORST JOEL G [US], et al

Cited by

CN112743485A; KR102526713B1; CN110900752A; CN104647489A; CN106541483A; CN105150305A; EP4403324A1; US12064897B2

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