

Title (en)

Arrangement for the automated insertion of electric terminated conductors in plug housings.

Title (de)

Einrichtung zum automatischen Montieren von elektrischen Leitern mit Kontaktteilen in Steckergehäuse.

Title (fr)

Dispositif pour le montage automatique de câbles électriques avec pièces de connexion dans des boîtiers de prise.

Publication

EP 0440955 B1 19950315 (DE)

Application

EP 90124728 A 19901219

Priority

CH 37290 A 19900206

Abstract (en)

[origin: EP0440955A1] By means of this arrangement for the automated insertion of plug housings (5) and electrical conductors, in each case one plug housing (5) on the end of a cable production line is plugged simultaneously onto both contact parts (8.1, 8.2) of an electrical conductor, with the aid of an industrial robot (1). Each end of the electrical conductor is gripped by the double gripper (11) of an additional transfer module (40) and is transferred in a fitment position (32) to a stationary gripper (20). Before this transfer, when the electrical conductor is gripped by the double gripper (11) alone, the plug housings are plugged onto the contact parts and the insertion force is checked. After the transfer of the electrical conductor by means of the stationary gripper (20), the double gripper (11) carries out a rearwards cyclic movement into a transfer position (30), in order to grip a new electrical conductor. At the same time, after the insertion pressure has been monitored, the plug housing (5) is plugged as an entity onto the contact part (8.1, 8.2) by the robot gripper (3) of the industrial robot (1), and correct seating is confirmed by checking the withdrawal pressure. The electrical conductor (8), which is connected to the plug housing (5), is passed by means of a stripping movement of the robot gripper (3) of the industrial robot (1) under the stationary stripper (18). <IMAGE>

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H01R 43/20

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CPC (source: EP)

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Cited by

DE4224194A1; AT410609B; DE102019106710A1; CN113783068A; CN110459933A; CN109742635A; CN104124595A; DE4002193A1; CN108899737A; DE102009040697A1; CN108233139A; CN111556801A; FR2740917A1; US5774981A; EP0660466A3; US8646822B2; WO2018189103A1; WO2019206656A1; EP0534822B1; WO2019206621A1; WO2020187349A1; DE102019106710B4; US11276992B2; EP3827479B1

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