

Title (en)
WORK ROBOT AND TEXTILE MACHINE PROVIDED WITH WORK ROBOT

Title (de)
ARBEITSROBOTER UND TEXTILMASCHINE MIT EINEM ARBEITSROBOTER

Title (fr)
ROBOT DE TRAVAIL ET MACHINE TEXTILE ÉQUIPÉE D'UN ROBOT DE TRAVAIL

Publication
EP 3613687 B1 20231129 (EN)

Application
EP 18787764 A 20180328

Priority
• JP 2017082782 A 20170419
• JP 2018012789 W 20180328

Abstract (en)
[origin: EP3613687A1] Static electricity generated in a retaining portion is swiftly removed and an influence of the static electricity on a controller is restrained. A yarn threading robot 3 performing yarn threading to a take-up apparatus 2 includes a robot main body 31, a robotic arm 32 connected to the robot main body 31, a suction gun 37 attached to the robotic arm 32 to retain yarns, a robot controller 102, and a terminal 55d in contact with a grounded ground wire 54. A conductive path 60 is formed to extend from the suction gun 37 to the terminal 55d without passing the robot controller 102 so as to cause the suction gun 37 to be electrically conductive with the terminal 55d. The suction gun 37 is connected to the ground wire 54 via the conductive path 60 and the terminal 55d so as to be grounded. On this account, the static electricity generated in the suction gun 37 due to contact with the yarn Y is swiftly removed and the occurrence of adverse effects due to the flow of electric charges to the robot controller 102 is restrained.

IPC 8 full level
B65H 51/16 (2006.01); **B25J 19/06** (2006.01); **B65H 54/26** (2006.01); **B65H 54/70** (2006.01); **B65H 67/08** (2006.01); **D01D 7/00** (2006.01); **D01D 13/02** (2006.01); **D02J 1/22** (2006.01)

CPC (source: EP)
B65H 54/26 (2013.01); **B65H 54/70** (2013.01); **D01D 7/00** (2013.01); **D01D 13/02** (2013.01); **B65H 2301/5321** (2013.01); **B65H 2701/3132** (2013.01)

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

DOCDB simple family (publication)
EP 3613687 A1 20200226; **EP 3613687 A4 20201230**; **EP 3613687 B1 20231129**; CN 109195893 A 20190111; CN 109195893 B 20200728; JP 6636655 B2 20200129; JP WO2018193803 A1 20191107; TW 201839195 A 20181101; TW I757470 B 20220311; WO 2018193803 A1 20181025

DOCDB simple family (application)
EP 18787764 A 20180328; CN 201880002183 A 20180328; JP 2018012789 W 20180328; JP 2018561068 A 20180328; TW 107112690 A 20180413