Title (en)

TORCHON LACE MACHINE

Title (de)

SPITZENKLÖPPELMASCHINE

Title (fr)

MÉTIER À DENTELLE TORCHON

Publication

EP 2657384 A1 20131030 (EN)

Application

EP 11850799 A 20111110

Priority

- JP 2010286776 A 20101222
- JP 2011006280 W 20111110

Abstract (en)

A torchon lace machine capable of immediately taking treatments such as stopping the torchon lace machine, preventing a damage of rotor metals, reducing damages of various kinds of components transmitting rotation to the rotor metals, preventing a pattern disorder, when rotation errors occur at a spindle due to a collision of adjacent rotor metals caused by a timing disorder, getting caught of a working wear of an operator, getting caught of broken threads to the spindle, is provided. In the torchon lace machine according to the present invention, a transmission gear 6 transmitting a drive force from a motor drive part to a horizontal shaft 4 driving rotor metals 3 rotatably fitted to vertical shafts 2 in a horizontal direction is provided, in which the vertical shafts 2 are annularly disposed at a base 1 with a predetermined interval, an axial core part of the transmission gear is divided into a horizontal shaft transmission side and a motor drive part transmission side, a cam is formed at the divisional surface to make the motor drive part side move upward against a spring pressure for a load from the horizontal shaft side, and to be integrated for a load from the motor drive part side, and a sensor monitoring the moving upward of the transmission gear is provided.

IPC 8 full level

D04C 3/38 (2006.01); **D04C 3/48** (2006.01)

CPC (source: EP KR)

D04C 3/38 (2013.01 - EP KR); **D04C 3/48** (2013.01 - EP)

Cited by

US10555581B2; US11103028B2; WO2018222705A1; US11457685B2; WO2016191474A1; US9920462B2; US10060057B2; US10238176B2; EP4079951A1; US10280538B2; US10863794B2; US10870933B2; US11339513B2; WO2018222893A1; US10743618B2; EP4008821A1; WO2018222878A1; WO2018222703A1; WO2018222885A1; US11051573B2; WO2019099816A1; US10674791B2; EP4085780A1; WO2018222888A1; WO2018222881A1; US10806210B2; US11202483B2; EP4050142A1; US9839253B2; WO2018222721A1; US10299544B2; WO2019236945A1; EP3987969A1; US11547171B2; US11877617B2

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 2657384 A1 20131030; **EP 2657384 A4 20140618**; **EP 2657384 B1 20151014**; CN 103270206 A 20130828; CN 103270206 B 20140827; JP 2012132128 A 20120712; JP 5652821 B2 20150114; KR 101852220 B1 20180425; KR 20140004139 A 20140110; WO 2012086117 A1 20120628

DOCDB simple family (application)

EP 11850799 A 20111110; CN 201180061863 A 20111110; JP 2010286776 A 20101222; JP 2011006280 W 20111110; KR 20137019236 A 20111110