

Title (en)
WEFT TRAVELING CONDITION DETECTION APPARATUS IN AIR JET LOOM

Title (de)
SCHUSSFADENLAUFZUSTANDSERKENNUNGSVORRICHTUNG IN EINER LUFTDÜSENWEBMASCHINE

Title (fr)
APPAREIL DE DÉTECTION DE CONDITION DE DÉPLACEMENT DE TRAME DANS UN MÉTIER À TISSER À JET D'AIR

Publication
EP 3323920 A1 20180523 (EN)

Application
EP 17200757 A 20171109

Priority
JP 2016224931 A 20161118

Abstract (en)
A weft traveling condition detection apparatus in an air jet loom detects a traveling condition of a weft yarn that is inserted through a weft passage by air injection of a main nozzle and a sub-nozzle. The apparatus includes a balloon sensor, and a first weft sensor, and a comparison processor determining a time difference. The apparatus includes a first memory storing data of values representing the time difference relative to an injection pressure of the sub-nozzle, a second weft sensor, and an averaging processor averaging an integrated voltage for different injection pressure of the sub-nozzle to determine the average of the integral value, a second memory storing data of values representing the average of integral value relative to the injection pressure, and a display on which the data of values stored in the first and second memories are indicated in one chart.

IPC 8 full level
D03D 47/00 (2006.01); **D03D 47/30** (2006.01)

CPC (source: CN EP)
D03D 47/304 (2013.01 - CN EP); **D03D 47/3073** (2013.01 - CN); **D03D 47/3093** (2013.01 - EP)

Citation (applicant)
• JP H04241135 A 19920828 - TOYODA AUTOMATIC LOOM WORKS
• JP 2016186144 A 20161027 - TOYOTA IND CORP, et al

Citation (search report)
• [AD] JP 2016186144 A 20161027 - TOYOTA IND CORP, et al
• [AD] JP H04241135 A 19920828 - TOYODA AUTOMATIC LOOM WORKS

Cited by
CN112779649A; EP4019678B1

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
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DOCDB simple family (application)
EP 17200757 A 20171109; CN 201711129439 A 20171115; JP 2016224931 A 20161118