

Title (en)

METHOD FOR MONITORING WEFT TRAVELING CONDITION IN AIR JET LOOM

Title (de)

VERFAHREN ZUM ÜBERWACHEN DER SCHUSSTRANSPORTBEDINGUNG IN EINER LUFTDÜSENWEBMASCHINE

Title (fr)

PROCÉDÉ DE SURVEILLANCE DE L'ÉTAT DE DÉPLACEMENT DE TRAME DANS UN MÉTIER À TISSER À JET D'AIR

Publication

EP 3144422 A3 20170426 (EN)

Application

EP 16184668 A 20160818

Priority

JP 2015182415 A 20150916

Abstract (en)

[origin: EP3144422A2] There is provided a method for monitoring weft traveling condition in an air jet loom that includes a weft measuring and storing device having a drum, a weft stop pin, and a balloon sensor that detects the release of the weft yarn. The air jet loom further includes a weft insertion nozzle, a plurality of sub-nozzles, a brake, and a weft sensor that is disposed within a width of cloth. The weft sensor is disposed upstream of a position of leading end of the weft yarn corresponding to a brake timing of the brake in weft insertion direction. The weft traveling condition is monitored by grasping a time difference between a weft passage timing given by a weft detection signal generated by the weft sensor and a weft release timing given by a weft release signal generated by the balloon sensor.

IPC 8 full level

D03D 47/30 (2006.01); **D03D 47/34** (2006.01)

CPC (source: CN EP)

D03D 47/30 (2013.01 - CN); **D03D 47/3033** (2013.01 - EP); **D03D 47/304** (2013.01 - EP); **D03D 47/3073** (2013.01 - EP);
D03D 51/00 (2013.01 - CN)

Citation (search report)

- [AD] JP H04240249 A 19920827 - NISSAN MOTOR
- [A] WO 2010136194 A1 20101202 - PICANOL NV [BE], et al
- [A] EP 0554222 A1 19930804 - TOYODA AUTOMATIC LOOM WORKS [JP]
- [A] JP H0693534 A 19940405 - TOYODA AUTOMATIC LOOM WORKS

Cited by

EP3470562A1; EP3498900A1; EP4019678A1; CN114606627A

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)

EP 3144422 A2 20170322; **EP 3144422 A3 20170426**; **EP 3144422 B1 20181017**; CN 107034575 A 20170811; CN 107034575 B 20180907;
JP 2017057516 A 20170323; JP 6135731 B2 20170531

DOCDB simple family (application)

EP 16184668 A 20160818; CN 201610811539 A 20160908; JP 2015182415 A 20150916