

Title (en)

SYSTEM FOR DETECTING A PARTIAL OR TOTAL OBSTRUCTION OF AT LEAST ONE INTERNAL PIPE OF A TOOL

Title (de)

SYSTEM ZUR ERKENNUNG EINER PARTIELLEN ODER VOLLSTÄNDIGEN VERSTOPFUNG VON MINDESTENS EINEM INNENROHR EINES WERKZEUGS

Title (fr)

SYSTEME DE DETECTION D'UNE OBSTRUCTION PARTIELLE OU TOTALE D'AU MOINS UNE CANALISATION INTERNE D'UN OUTIL

Publication

EP 3243045 A1 20171115 (FR)

Application

EP 16700032 A 20160104

Priority

- FR 1550022 A 20150105
- EP 2016050026 W 20160104

Abstract (en)

[origin: WO2016110465A1] The invention primarily relates to a system (10) for detecting a total or partial obstruction of at least one internal fluid pipe (11) of a tool (12), characterised in that said system (10) comprises: a pneumatic system (13) that is intended to be connected upstream of said internal pipe (11) of said tool (12), a pressure source (16) that is connected to said pneumatic system (13) by means of a solenoid valve (17), and a control unit (22) that is configured to open said solenoid valve (17) so as to pressurise said pneumatic system (13), and then to close said solenoid valve (17) so as to let said pneumatic system (13) be emptied freely by means of said internal pipe (11), and to detect an obstruction state of said internal pipe (11) depending on an analysis over time of a change in the pressure in said pneumatic system (13).

IPC 8 full level

G01F 1/34 (2006.01); **B23Q 11/10** (2006.01); **B23Q 17/00** (2006.01)

CPC (source: CN EP RU US)

B23Q 11/10 (2013.01 - CN EP US); **B23Q 11/1023** (2013.01 - US); **B23Q 11/1053** (2013.01 - US); **B23Q 11/1084** (2013.01 - US); **B23Q 17/0904** (2013.01 - CN EP US); **B23Q 17/0909** (2013.01 - US); **B23Q 17/0985** (2013.01 - US); **G01F 1/34** (2013.01 - RU); **G01F 1/74** (2013.01 - US); **G01M 1/365** (2013.01 - US); **G01N 35/1016** (2013.01 - US); **G08B 21/182** (2013.01 - US)

Citation (search report)

See references of WO 2016110465A1

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)

FR 3031388 A1 20160708; FR 3031388 B1 20170804; CN 107405744 A 20171128; CN 107405744 B 20201009; EP 3243045 A1 20171115; JP 2018503835 A 20180208; JP 2022028773 A 20220216; JP 7045855 B2 20220401; RU 2017127271 A 20190208; RU 2017127271 A3 20190529; RU 2705760 C2 20191111; TW 201637771 A 20161101; TW I695751 B 20200611; US 10442049 B2 20191015; US 2018015583 A1 20180118; WO 2016110465 A1 20160714; ZA 201705171 B 20181219

DOCDB simple family (application)

FR 1550022 A 20150105; CN 201680005005 A 20160104; EP 16700032 A 20160104; EP 2016050026 W 20160104; JP 2017553457 A 20160104; JP 2021183773 A 20211111; RU 2017127271 A 20160104; TW 104142999 A 20151221; US 201615540621 A 20160104; ZA 201705171 A 20170731