

Title (en)

FLYING SAW AND FIXED SAW FOR CUTTING EXTRUDED PROFILES AND METHODS OF USE

Title (de)

FLIEGENDE SÄGE UND FESTSÄGE ZUM SCHNEIDEN VON EXTRUDIERTEN PROFILEN UND VERWENDUNGSVERFAHREN

Title (fr)

SCIE VOLANTE ET SCIE FIXE POUR COUPER DES PROFILÉS EXTRUDÉS ET PROCÉDÉS D'UTILISATION

Publication

**EP 3624975 A1 20200325 (EN)**

Application

**EP 17733980 A 20170602**

Priority

EP 2017063570 W 20170602

Abstract (en)

[origin: WO2018219477A1] A flying saw for cutting extruded profiles comprises a circular saw having a saw blade 11 and a first saw blade drive 17 for driving the saw blade to rotate for cutting, a support 14 for the circular saw on which the circular saw is supported and adapted to be moved in a first direction FSH, in synchronisation with a movement of an extruded profile to be cut in the first direction F, a second saw blade drive 15, 16 for driving the saw blade to move perpendicular to the first direction for cutting an extruded profile to be cut, a control 13 for controlling the first saw blade drive, the support and the second saw blade drive which is adapted to control the rotational speed of the saw blade and the movement of the saw blade in the second direction to obtain a cutting speed resulting from the rotational speed of the saw blade and the movement of the saw blade in the second direction according to a control scheme, and a temperature sensor 12 adapted for detecting the temperature of the cutting edge of the saw blade. The control 13 is adapted to control the obtained cutting speed using the detected temperature of the cutting edge of the saw blade to keep the temperature in a predefined temperature range by increasing or decreasing the rotational speed and/or the movement of the saw blade in the second direction. [Fig. 3]

IPC 8 full level

**B23D 45/20** (2006.01); **B23D 45/02** (2006.01); **B23D 47/08** (2006.01); **B23D 59/00** (2006.01); **B23Q 11/14** (2006.01); **B23Q 15/12** (2006.01)

CPC (source: EP)

**B23D 45/021** (2013.01); **B23D 45/20** (2013.01); **B23D 47/08** (2013.01); **B23D 59/001** (2013.01); **B23Q 15/12** (2013.01); **G05B 19/404** (2013.01); **G05B 19/4163** (2013.01); **B23Q 11/14** (2013.01); **G05B 2219/37428** (2013.01); **G05B 2219/37434** (2013.01); **G05B 2219/45144** (2013.01); **G05B 2219/49206** (2013.01)

Citation (search report)

See references of WO 2018219477A1

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)

**WO 2018219477 A1 20181206**; CN 110785251 A 20200211; EP 3624975 A1 20200325

DOCDB simple family (application)

**EP 2017063570 W 20170602**; CN 201780091494 A 20170602; EP 17733980 A 20170602