

Title (en)  
LEVELLING MACHINE WITH MULTIPLE ROLLERS

Title (de)  
NIVELLIERMASCHINE MIT MEHREREN WALZEN

Title (fr)  
MACHINE DE PLANAGE A ROULEAUX MULTIPLES

Publication  
**EP 2475473 A1 20120718 (FR)**

Application  
**EP 09783580 A 20090930**

Priority  
• EP 09290685 A 20090909  
• EP 2009062659 W 20090930  
• EP 09783580 A 20090930

Abstract (en)  
[origin: WO2011029485A1] The invention relates to a machine for levelling a strip of material, comprising: a lower stationary back plate (1) from which extend a plurality of vertical beams (2a, 2b) located on either side of a longitudinal axis along which the strip of material travels; a lower stationary levelling chassis (5b) which, during the operation of the levelling machine, rests on the stationary base (1); and an upper levelling chassis (5a), each chassis comprising a plurality of rollers (51a, 51b) spaced apart from one another and rotatably mounted in bearings (52) having axes perpendicular to the longitudinal axis (P) along which the material moves. The invention is characterised in that the levelling machine also comprises: an upper stationary back plate (11) solidly connected to the vertical beams (2a, 2b) and rigidly secured to the upper end of each beam (2a, 2b); and moving coupling means (9) for coupling the upper levelling chassis (5a) to the upper back plate (11), allowing the movement of the upper levelling chassis. The invention also includes means (10) allowing the vertical translational movement of the upper levelling chassis (5a) in relation to the upper stationary back plate (11) between a rest position in which the rollers (51a) of the upper levelling chassis (5a) are moved away from the rollers (51b) of the lower levelling chassis (5b) and a levelling position in which the rollers of the upper levelling chassis are moved towards the rollers of the lower levelling chassis so that the strip is forced to travel along an undulating path.

IPC 8 full level  
**B21D 1/02** (2006.01); **B21D 37/12** (2006.01)

CPC (source: EP KR US)  
**B21D 1/02** (2013.01 - EP KR US); **B21D 37/12** (2013.01 - EP KR US)

Citation (search report)  
See references of WO 2011029485A1

Cited by  
CN107921501A; CN104384246A; EP2881187A1; US11179759B2; WO2017013099A1

Designated contracting state (EPC)  
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 SE SI SK SM TR

DOCDB simple family (publication)  
**WO 2011029485 A1 20110317**; BR 112012005193 A2 20160308; BR 112012005193 B1 20191022; CN 102481611 A 20120530; CN 102481611 B 20151021; EP 2475473 A1 20120718; EP 2475473 B1 20121226; ES 2401979 T3 20130425; IN 2039DEN2012 A 20150821; JP 2013503752 A 20130204; KR 101606237 B1 20160324; KR 20120060884 A 20120612; PL 2475473 T3 20130531; RU 2012113625 A 20131020; RU 2518828 C2 20140610; SM T201300037 B 20130506; US 2012174644 A1 20120712; US 9126250 B2 20150908

DOCDB simple family (application)  
**EP 2009062659 W 20090930**; BR 112012005193 A 20090930; CN 200980161384 A 20090930; EP 09783580 A 20090930; ES 09783580 T 20090930; IN 2039DEN2012 A 20120307; JP 2012528232 A 20090930; KR 20127008936 A 20090930; PL 09783580 T 20090930; RU 2012113625 A 20090930; SM 201300037 T 20130403; US 200913395171 A 20090930