

Title (en)

MULTI-COMPONENT INJECTION-MOLDING MACHINE HAVING A ROTATABLE CENTER PART

Title (de)

MEHRKOMPONENTEN-SPRITZGIESSMASCHINE MIT DREHBAREM MITTELTEIL

Title (fr)

MACHINE DE MOULAGE PAR INJECTION À PLUSIEURS COMPOSANTS POURVUE D'UNE PARTIE CENTRALE ROTATIVE

Publication

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Application

**EP 14758089 A 20140820**

Priority

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- EP 2014002281 W 20140820

Abstract (en)

[origin: WO2015024657A1] The invention relates to the removal of the loads of an injection-molding machine occurring during operation, said injection-molding machine having a three-plate design and comprising at least one turning unit (6). The occurring loads of the turning unit (6) are supported partially by means of the rails (H) and partially by means of linear guides (11). In a three-plate injection-molding machine comprising a nozzle plate (2), a movable second mold clamping plate (3), a movable end plate (E), a closing unit (S) that acts between the end plate and the second mold clamping plate, and a turning unit (6) arranged between the nozzle plate and the second mold clamping plate, rails (H) extend between the nozzle plate and the end plate. The mold-half carrier (9) of the turning unit (6) is supported on a support structure (7) in such a way that the mold-half carrier of the turning unit can be rotated about an axis of rotation (D) oriented transversely to the machine axis (M), which support structure forms the abutment for the mold-half carrier rotary drive. The weight of the support structure (7) and of the mold-half carrier (9) of the turning unit (6) is transferred directly from the support structure (7) into the machine bed (1) by means of linear guides (11), and at least a substantial part of the reaction torque applied to the support structure (7) during the rotational acceleration of the mold-half carrier (9) is transferred to at least one of the rails (H) by means of at least one supporting guide.

IPC 8 full level

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Citation (search report)

See references of WO 2015024657A1

Citation (examination)

- US 2012049408 A1 20120301 - OKAMOTO AKIO [JP]
- CH 705140 A2 20121231 - FOBOHA GMBH FORMENBAU [DE]
- "ALLES DREHT SICH", KUNSTSTOFFE, CARL HANSER VERLAG, MUNCHEN, DE, 1 January 2005 (2005-01-01), pages 77, XP001205070, ISSN: 0023-5563
- DASSOW J: "FUER ALLE FAELLE GERUESTET. TECHNOLOGIEFUEHRERSCHAFT DURCH MEHRKOMPONENTENTECHNIK", KUNSTSTOFFE, CARL HANSER VERLAG, MUNCHEN, DE, vol. 92, no. 9, 1 September 2002 (2002-09-01), pages 105 - 109, XP001125593, ISSN: 0023-5563

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