

Title (en)
ROLLING MACHINE WITH PLOTS PROVIDED WITH A HANDLING SUBASSEMBLY

Title (de)
KNÜPPEL-WALZWERK, DAS MIT EINER MANIPULATOR-UNTERBAUGRUPPE AUSGESTATTET IST

Title (fr)
LAMINOIR À LOPINS ÉQUIPÉ D'UN SOUS-ENSEMBLE MANIPULATEUR

Publication
EP 4011512 A1 20220615 (FR)

Application
EP 20212898 A 20201209

Priority
EP 20212898 A 20201209

Abstract (en)
[origin: WO2022122826A1] This forging rolling mill comprises two rolls for shaping a blank (E) that is to be shaped, each shaping roll being equipped with at least one rolling tool and being driven in rotation about an axis of rotation by at least one respective drive motor, and a manipulator subassembly (20) for moving the blank with respect to the shaping rolls. This manipulator subassembly comprises a gripper (39) for gripping the blank and a carriage (35) for moving the gripper at least in a direction (X38) of rolling of the blank. The manipulator subassembly (20) comprises at least one linear motor (200) for moving the carriage (35) along the rolling direction (X38). The rolling direction (X38) is perpendicular to the axis of rotation of the rolling tool. The linear motor (200) is configured to accelerate the blank (E) and to selectively exert on the blank either a tensile force, which tends to withdraw the blank from a gap defined between the rolling tools (72, 82), or a braking force, which tends to limit an ejection speed of the blank.

Abstract (fr)
Ce laminoir à lopins comprend deux cylindres de conformation d'une ébauche (E) à façonner, chaque cylindre de conformation étant équipé d'au moins un outil de laminage et entraîné en rotation autour d'un axe de rotation par au moins un moteur d'entraînement respectif, et un sous-ensemble manipulateur (20) de déplacement de l'ébauche vis-à-vis des cylindres de conformation. Ce sous-ensemble manipulateur comprend une pince (39) de préhension de l'ébauche et un chariot (35) de déplacement de la pince au moins selon une direction de laminage (X38) de l'ébauche. Le sous-ensemble manipulateur (20) comprend au moins un moteur linéaire (200) de déplacement du chariot (35) selon la direction de laminage (X38).

IPC 8 full level
B21B 1/02 (2006.01); **B21B 39/06** (2006.01)

CPC (source: EP KR US)
B21B 1/02 (2013.01 - EP KR US); **B21B 39/06** (2013.01 - EP KR US); **B21J 13/10** (2013.01 - EP KR); **B21B 2001/022** (2013.01 - EP KR US)

Citation (search report)

- [X] CN 108296292 A 20180720 - UNIV NINGBO
- [X] FR 2390224 A1 19781208 - LELEU ANDRE [FR]
- [A] DE 102013100302 A1 20140717 - LANGENSTEIN & SCHEMANN GMBH [DE]

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)
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