

Title (en)
MACHINE TOOL AND METHOD FOR PROCESSING A SOIL

Title (de)
ARBEITSMASCHINE UND VERFAHREN ZUM BEARBEITEN EINES BODENS

Title (fr)
MACHINE DE TRAVAIL ET PROCÉDÉ DE TRAITEMENT D'UN SOL

Publication
EP 3907371 B1 20230628 (DE)

Application
EP 20173420 A 20200507

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Abstract (en)
[origin: WO2021224168A1] The invention relates to a work machine (10) and to a method for working the ground by means of the work machine (10), the work machine comprising a mast, along which a top drive (30) is moved vertically by means of an adjustment device, by means of which top drive a telescoping kelly bar system (40) having at least two kelly bars is shifted and guided. For torque transfer, the kelly bars are provided, on their outer and/or inner faces, with axially running driver strips (66) and locking pockets (68) on the driver strips and/or axial locking elements (62), which are moved into the locking pockets (68) in order to axially lock the kelly bars and are moved out of the locking pockets in order to release the kelly bars. According to the invention, a locking state of the kelly bars is automatically checked by means of a controller, wherein the adjustment device of the top drive (30) and/or the main cable winch (50) is actuated by means of the controller so that the kelly bars (42, 46) are axially moved relative to each other, a movement path of the kelly bars relative to each other is sensed and/or an axial force during the movement of the kelly bars is axially sensed by means of a sensing device, and a locking state of the kelly bars is determined by means of the controller according to the sensed movement path and/or the sensed axial force.

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Citation (examination)
• US 2019169941 A1 20190606 - BAUER SEBASTIAN [DE], et al
• EP 0947664 B1 20040825 - BAUER MASCHINEN GMBH [DE]

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