

ABSTRACT

**LIFTING MECHANISM FOR AN APPARATUS FOR LIFTING CONSTRUCTION PLATES,
LIFTING APPARATUS COMPRISING THIS MECHANISM, AND LIFTING METHOD USING
THIS APPARATUS**

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The present invention proposes a silent, safe, fast, multi-purpose and easy-to-service lifting mechanism. For this purpose, the mechanism comprises: a telescopic mast
10 with a fixed segment (11) and a first telescopic segment (12) mounted so as to slide inside the fixed segment; a rack (13) having a set width and provided with teeth (131), which is attached to the first telescopic segment; a gear system comprising: a pinion (21) directly meshed with the rack, a driving shaft (22) which meshes with the pinion and is attached to a steering wheel, a reversible locking means for the driving shaft, designed to lock the driving
15 shaft against rotation as long as no action is taken by a user.