

Title (en)

APPARATUS FOR INSERTING AND/OR WITHDRAWING A CONSTRUCTION PROFILE

Publication

EP 0237971 B1 19911002 (DE)

Application

EP 87103629 A 19870313

Priority

DE 3608732 A 19860315

Abstract (en)

[origin: EP0237971A2] An apparatus for inserting and/or withdrawing a construction profile in the form of trench sheeting, sheet-piling elements or the like into or out of the ground, having an oscillatory system which is designed as a vibratory hammer and consists of an exciter which is mounted in a housing via spring elements and can be vibrationally connected by means of a clamping device to the construction profile to be moved. According to the invention: a) the clamping device (3) is mechanically connected to two impact surfaces (7, 8) which are at a distance apart, and the housing (2) is fastened so as to be displaceable relative to the impact surfaces (7, 8); b) the distance between the percussive surfaces of the exciter and the impact surfaces (7, 8) can be limited by adjustable stops (13, 14), and c) the exciter (1) can be restrained with the clamping device (3), and the housing (2) is designed in such a way that it can be acted upon by a variable static force in the respective direction of movement of the construction profile (4). The adjustable stops (13, 14) for limiting the spring travel of the springs which are active between the exciter (1) and its housing (2) each consist of a screw bolt which is provided with lock-nuts. Apart from the function as a vibrator known per se, the apparatus can be used as a hammer or vibrator, depending on how this is called for by the ground conditions, under constant clamping and thus guidance of the construction profile in the pulling or thrust direction while maintaining a statically acting force. The adjustable stops enable the system to be optimised, and the damping plates provide for a corresponding reduction in wear and noise. <IMAGE>

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