

Title (en)

VIBRATION EXCITER FOR GROUND COMPACTING DEVICES

Title (de)

SCHWINGUNGSERREGER FÜR BODENVERDICHTUNGSGERÄTE

Title (fr)

GENERATEURS DE VIBRATIONS POUR APPAREILS DE COMPACTAGE DU SOL

Publication

EP 1212148 B1 20040721 (DE)

Application

EP 00965951 A 20000908

Priority

- DE 19943391 A 19990910
- EP 0008806 W 20000908

Abstract (en)

[origin: WO0119535A1] The invention relates to a vibration exciter for ground compacting devices, for example, for a vibratory plate, comprising unbalanced shafts (1, 2), which are arranged parallel or coaxial to one another, which can be driven in counter-rotation with the same rotational speed, and which each carry at least one centrifugal weight (3, 4), whereby the phase position of the centrifugal weights (3, 4) can be adjusted by a phase adjusting device in such a manner that the vertical components of the centrifugal forces (5, 6) generated by the centrifugal weights (3, 4) are cancelled out in each rotational position. At the same time, the horizontal components of the centrifugal forces (5, 6) are correspondingly added in the same direction. This phase position prevents the vibratory plate, when stationary, from introducing any vertical vibration into the ground to be compacted, but enables it to introduce shear stresses via a ground contact plate into the ground, preferably an asphalt surface, in order to compact cracks and pores.

IPC 1-7

B06B 1/16; **E02D 3/074**

IPC 8 full level

B06B 1/16 (2006.01); **E02D 3/074** (2006.01)

CPC (source: EP US)

B06B 1/166 (2013.01 - EP US); **E02D 3/074** (2013.01 - EP US)

Designated contracting state (EPC)

CH DE GB LI SE

DOCDB simple family (publication)

WO 0119535 A1 20010322; DE 19943391 A1 20010412; DE 50007146 D1 20040826; EP 1212148 A1 20020612; EP 1212148 B1 20040721; JP 2003509192 A 20030311; US 6655871 B1 20031202

DOCDB simple family (application)

EP 0008806 W 20000908; DE 19943391 A 19990910; DE 50007146 T 20000908; EP 00965951 A 20000908; JP 2001523150 A 20000908; US 7089102 A 20020307