

Title (en)
ARRANGEMENT FOR PROVIDING A PULSING COMPRESSIVE FORCE

Title (de)
ANORDNUNG ZUR BEREITSTELLUNG EINER PULSIERENDEN DRUCKKRAFT

Title (fr)
AGENCEMENT POUR FOURNIR UNE FORCE DE PRESSION PULSÉE

Publication
EP 2558649 B1 20141119 (DE)

Application
EP 10714159 A 20100416

Priority
CH 2010000104 W 20100416

Abstract (en)
[origin: WO2011127611A2] The invention relates to a soil compacting device. The device comprises an exciter part (1), which has an unbalance exciter (2) for producing an intermittent exciter force and which has a contact surface (3) for transmitting a force component of the exciter force directed perpendicularly to the contact surface (3) to the soil surface (4) to be compacted as a pulsing compressive force. The device also comprises a damper part (5), which is connected to the exciter part (1) by means of a spring-damper unit (15). The spring stiffness of the spring-damper unit (15), the damping of the spring-damper unit (15), the spring pre-load of the spring-damper unit (15), the mass of the damper part (5), the mass moment of inertia of the damping part (5), the mass of the exciter part (1), and/or the mass moment of inertia of the exciter part (1) can be varied during operation. It is thereby possible for the first time to provide soil compacting tools functioning according to the damper principle that can always be operated at the optimal operating point for different soil types and during progressing compaction and that have corresponding advantages regarding the compacting performance and durability of the tools.

IPC 8 full level
E02D 3/074 (2006.01)

CPC (source: EP US)
E02D 3/074 (2013.01 - EP US)

Designated contracting state (EPC)
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 SE SI SK SM TR

DOCDB simple family (publication)
WO 2011127611 A2 20111020; WO 2011127611 A3 20130321; AU 2010351124 A1 20121129; BR 112012026543 A2 20160712; EP 2558649 A2 20130220; EP 2558649 B1 20141119; US 2013058717 A1 20130307; US 8727660 B2 20140520

DOCDB simple family (application)
CH 2010000104 W 20100416; AU 2010351124 A 20100416; BR 112012026543 A 20100416; EP 10714159 A 20100416; US 201013641621 A 20100416