

Title (en)
Aseismic foundation

Title (de)
Erdbebensicheres Fundament

Title (fr)
Fondation antisismique

Publication
EP 1484450 A2 20041208 (EN)

Application
EP 04386019 A 20040602

Priority
GR 2003100248 A 20030602

Abstract (en)
The aseismic foundation consists of three plates (1,2,3) of reinforced concrete. Plate (1) touches the ground (20). Between plate (1) and plate (2) there are rigid metal spheres (4), and between plate (2) and plate (3), there are vertical compression-tension springs (6). Plate (2) is connected with horizontal compression-tension springs (5), to a reinforced concrete anchor wall (3), which is fixed to the ground (20) and solid-webbed attached to plate (1). Thus, the anchor wall (8) and plate (1) follow exactly the movement of the ground (20). The horizontal metal springs (5) are positioned symmetrical and perimetrical on plate (1), having the same total elastic constant for both its vertical directions. The total elastic constant of spring (5) is such, that the characteristic period of the horizontal movement of the system plate (2), plate (3), springs (5) superstructure (19), is equal with the characteristic period of the horizontal component of the ground vibration. The vertical compression-tension springs (6) have a total elastic constant, which allows for the characteristic period of the vertical movement of the system plate (3), vertical springs (6), superstructure (19), to be double than the characteristic period of the vertical movement of the ground (20).

IPC 1-7
E02D 27/34

IPC 8 full level
E02D 27/34 (2006.01); **E04H 9/02** (2006.01)

CPC (source: EP)
E02D 27/34 (2013.01)

Cited by
CN106460354A; WO2015145337A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1484450 A2 20041208; EP 1484450 A3 20060823; GR 1004897 B 20050518; GR 20030100248 A 20050218

DOCDB simple family (application)
EP 04386019 A 20040602; GR 2003100248 A 20030602