

Title (en)

Local seismic protection method for existing and/or possible construction sites destined for the foundation areas and those surrounding the building construction

Title (de)

Lokales seismisches Schutzverfahren für existierende und/oder potentielle Konstruktionsstandorte für Gebäudefundamente und deren Umgebungsbereiche

Title (fr)

Procédé de protection sismique locale pour des sites de construction existants et/ou éventuels destiné aux régions des fondations entourant la construction d'un immeuble

Publication

EP 1956147 B1 20120418 (EN)

Application

EP 08001690 A 20080130

Priority

IT RE20070014 A 20070209

Abstract (en)

[origin: EP1956147A1] A method for local seismic protection of building and/or built areas and/or of foundations and building adjacent zones, consists of interventions for injecting into the ground products, also expanding ones, effective even in the presence of water and/or humidity, and directed through special injection pipes (8) to act on the portions of ground (9) that require a reduction in the potential seismic effect towards overlying structures. Such portions of ground are localized and monitored with predetermined frequency and geometries before, during and after said injection interventions through a series of seismic sources (6) (energizers) and series of receivers (4) (transducers) for geophysical instrumental measurement connected to multi-channel acquisition systems (5) (seismograph/accelerometer). The attenuation of seismic effects is controlled by an increase in the mechanical features (elastic moduli) of the treated ground, in turn influenced by the progress of the surface Vs wave speed in the ground, essential parameter for the evaluation of the potential local seismic attenuation or amplification phenomenon.

IPC 8 full level

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CPC (source: EP)

E02D 3/12 (2013.01); **E02D 27/34** (2013.01); **E02D 37/00** (2013.01)

Cited by

CN110820790A; ITPR20080081A1; CN112182888A; FR3079621A1; LU92314B1; CN110361720A; CN106703836A; CN110820789A; CN115110599A; JP2018172962A; US2019186095A1; US10760236B2; US2012163923A1; JP2017020219A; ITUA20162691A1; US10138641B2; EP3298351A4; EP3798571A1; WO2015078722A1; WO2019114998A1; US10731316B2; US11585066B2; WO2011021985A1; WO2017182939A1; EP3040490A1; US10526763B2; US11879228B2

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