

Title (en)

STATIC PENETROMETER FOR EVALUATING THE LIQUEFIABLE CHARACTER OF A SOIL AND ASSOCIATED METHOD

Title (de)

STATISCHES PENETROMETER ZUR BEURTEILUNG DES VERFLÜSSIGBAREN CHARAKTERS VON BODEN UND ZUGEHÖRIGES VERFAHREN

Title (fr)

PENETROMETRE STATIQUE POUR L'EVALUATION DU CARACTERE LIQUEFIABLE D'UN SOL ET PROCEDE ASSOCIE

Publication

**EP 3669029 A1 20200624 (FR)**

Application

**EP 18765956 A 20180814**

Priority

- FR 1757732 A 20170818
- FR 2018052062 W 20180814

Abstract (en)

[origin: WO2019034822A1] The invention relates to a penetrometer (100) for evaluating the liquefiable character of a soil, comprising: • at least one central rod (1) terminated at a first end by a measuring tip (11); • at least one hollow tube (2) surrounding the central rod (1), the latter being capable of sliding inside the hollow tube (2). The penetrometer (100) also comprises an electrical cylinder (6) comprising an external body (61) solidly attached to the hollow tube (2) and a movable body (1), said movable body (1) being: • configured to transmit a movement to a second end (12) of the central rod (1) leading to a controlled pressing of the measuring tip (11) into the soil, and to measure a force applied to produce said movement, • and suitable for applying a vibration at a determined frequency to the second end (12) of the central rod (1).

IPC 8 full level

**E02D 1/02** (2006.01)

CPC (source: EP)

**E02D 1/022** (2013.01)

Citation (search report)

See references of WO 2019034822A1

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2019034822 A1 20190221**; EP 3669029 A1 20200624; EP 3669029 B1 20211006; ES 2902928 T3 20220330; FR 3070170 A1 20190222; FR 3070170 B1 20190906; JP 2020531721 A 20201105; JP 7138173 B2 20220915; PT 3669029 T 20220111

DOCDB simple family (application)

**FR 2018052062 W 20180814**; EP 18765956 A 20180814; ES 18765956 T 20180814; FR 1757732 A 20170818; JP 2020530733 A 20180814; PT 18765956 T 20180814