

Title (en)  
UNDERWATER DRILLING DEVICE AND METHOD FOR OBTAINING AND ANALYSING SOIL SAMPLES OF THE BED OF A BODY OF WATER

Title (de)  
UNTERWASSER-BOHRVORRICHTUNG UND VERFAHREN ZUM BESCHAFFEN UND ANALYSIEREN VON BODENPROBEN EINES GEWÄSSERBODENS

Title (fr)  
DISPOSITIF DE FORAGE IMMERGÉ ET PROCÉDÉ D'OBTENTION ET D'ANALYSE D'ÉCHANTILLONS DE SOL DU FOND D'UN PLAN D'EAU

Publication  
**EP 3117068 A1 20170118 (DE)**

Application  
**EP 14729223 A 20140513**

Priority  
EP 2014059760 W 20140513

Abstract (en)  
[origin: WO2015172818A1] The invention relates to an underwater drilling device and a method for obtaining and analysing soil samples of the bed of a body of water. An underwater drilling device with a base frame is lowered in a body of water and placed on the bed of a body of water. With a drilling drive that is mounted on the base frame and able to move vertically, a drill string consisting of at least one tubular drill string element is drilled into the bed of the body of water in a first drilling step, wherein a core sample is accommodated in a holder in the tubular drill string element. The holder with the core sample is stored in a storage location of a second storage region on the base frame. Subsequently, at least one further drilling step is carried out with a further drill string element. By means of at least one sensor device arranged on a base frame in a surrounding area of the drilling axis, at least one physical and/or chemical property of the core sample is determined. The data thus determined is saved in a data processing device together with data relating to the storage location of the core sample in the second storage region.

IPC 8 full level  
**E21B 25/18** (2006.01); **E21B 19/14** (2006.01); **E21B 41/00** (2006.01); **E21B 49/02** (2006.01)

CPC (source: EP US)  
**E21B 7/124** (2013.01 - US); **E21B 19/143** (2013.01 - EP US); **E21B 25/10** (2013.01 - US); **E21B 25/18** (2013.01 - EP US); **E21B 41/0007** (2013.01 - EP US); **E21B 47/12** (2013.01 - EP US); **E21B 49/025** (2013.01 - EP US)

Citation (search report)  
See references of WO 2015172818A1

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 2015172818 A1 20151119**; CA 2944062 A1 20151119; CA 2944062 C 20181106; CN 106661932 A 20170510; CN 106661932 B 20201222; EP 3117068 A1 20170118; EP 3117068 B1 20190306; ES 2729345 T3 20191031; JP 2017519130 A 20170713; JP 6307177 B2 20180404; US 2017152719 A1 20170601; US 9909377 B2 20180306

DOCDB simple family (application)  
**EP 2014059760 W 20140513**; CA 2944062 A 20140513; CN 201480078654 A 20140513; EP 14729223 A 20140513; ES 14729223 T 20140513; JP 2016562941 A 20140513; US 201415309912 A 20140513