

Title (en)  
EXCAVATION TOOL

Title (de)  
AUSGRABUNGSWERKZEUG

Title (fr)  
OUTIL D'EXCAVATION

Publication  
**EP 3184729 B1 20190508 (EN)**

Application  
**EP 15833073 A 20150811**

Priority  
• JP 2014167602 A 20140820  
• JP 2015072799 W 20150811

Abstract (en)  
[origin: EP3184729A1] A drilling tool of the present invention includes: a casing pipe; a ring bit having a larger diameter and disposed coaxially on a tip side of the casing pipe; and a pilot bit inserted into the ring bit through the inside of the casing pipe. An outer peripheral part at a tip of the pilot bit is provided with a bit head which is extended when rotated in a tool rotation direction during drilling. The ring bit is provided with a part to be engaged that is engaged with the extended bit head in the tool rotation direction, and a first abutting part capable of abutting against the extended bit head in a direction of an axis.

IPC 8 full level  
**E21B 10/32** (2006.01)

CPC (source: EP KR US)  
**E21B 10/327** (2013.01 - EP KR US); **E21B 10/627** (2013.01 - KR)

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

DOCDB simple family (publication)  
**EP 3184729 A1 20170628; EP 3184729 A4 20180418; EP 3184729 B1 20190508**; AU 2015304423 A1 20170302; CA 2957394 A1 20160225; CN 106661924 A 20170510; JP 2016044415 A 20160404; JP 6330573 B2 20180530; KR 20170042568 A 20170419; US 2017234075 A1 20170817; WO 2016027739 A1 20160225

DOCDB simple family (application)  
**EP 15833073 A 20150811**; AU 2015304423 A 20150811; CA 2957394 A 20150811; CN 201580041990 A 20150811; JP 2014167602 A 20140820; JP 2015072799 W 20150811; KR 20177002997 A 20150811; US 201515501975 A 20150811