

Title (en)

HAMMER DRILL AND/OR IMPACT HAMMER HAVING COOLING OF EQUIPMENT COMPONENTS

Title (de)

BOHR- UND/ODER SCHLAGHAMMER MIT KÜHLUNG VON GERÄTEKOMPONENTEN

Title (fr)

MARTEAU PERFORATEUR ET/OU PERCUTEUR AVEC REFROIDISSEMENT DES COMPOSANTS DE L'APPAREIL

Publication

**EP 2523780 B1 20200304 (DE)**

Application

**EP 11700320 A 20110113**

Priority

- DE 102010004724 A 20100115
- EP 2011000134 W 20110113

Abstract (en)

[origin: WO2011085989A1] The invention relates to a hammer drill and/or impact hammer comprising a cooling air channel (20) for guiding a cooling air flow from a cooling air fan (16) to an outside wall of a cylinder (7) of an internal combustion engine (1). The cooling air channel is designed such that it is tapered to the extent that partial cooling air flows guided between the respective cooling fins (21) are branched off the main cooling air flow. In such a way, the flow rate of the cooling air flow in the cooling air channel (20) remains substantially constant, resulting in optimized engine cooling. Additionally, it is possible to divide the cooling air channel (20) into two cooling air channels (26, 27) downstream of the cylinder (7). One of the cooling air channels guides cooling air to an exhaust gas system (30) of the internal combustion engine (1), while the other cooling air channel (27) guides cooling air to an outside wall of a guide housing (13) of a hammer mechanism (5). In such a way, heat sources inside the drill or hammer can be deliberately cooled.

IPC 8 full level

**B25D 9/10** (2006.01)

CPC (source: EP US)

**B25D 9/10** (2013.01 - EP US); **B25D 17/20** (2013.01 - EP US); **B25D 2211/068** (2013.01 - EP US); **B25D 2217/0061** (2013.01 - EP US)

Citation (examination)

GB 632560 A 19491128 - CARL STANLEY WEYANDT

Cited by

CN108890374A

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)

**WO 2011085989 A1 20110721**; CN 102770245 A 20121107; CN 102770245 B 20160120; DE 102010004724 A1 20110721; EP 2523780 A1 20121121; EP 2523780 B1 20200304; US 2013098650 A1 20130425; US 9272407 B2 20160301

DOCDB simple family (application)

**EP 2011000134 W 20110113**; CN 201180005736 A 20110113; DE 102010004724 A 20100115; EP 11700320 A 20110113; US 201113521077 A 20110113