

## Title (en)

Cooling agent jacket core and method for manufacturing a cylinder crankcase with narrow web thickness

## Title (de)

Kühlmittelmantelkern sowie Verfahren zur Herstellung eines Zylinderkurbelgehäuses mit schmaler Stegbreite

## Title (fr)

Noyau à chemise de refroidissement et procédé de fabrication d'un carter de vilebrequin à faible nervure

## Publication

**EP 2772325 A3 20171018 (DE)**

## Application

**EP 14151922 A 20140121**

## Priority

DE 102013101942 A 20130227

## Abstract (en)

[origin: EP2772325A2] Coolant jacket core (16) for producing a cylinder crank housing (10) with a narrow ridge width, comprises at least an integral base core (20), which comprises at least two adjacently arranged core body in hollow cylindrical section form, and a bar core (18), which interconnects the opposite radial ends of each core body in the cutting plane. Each of the two adjacently arranged core body exhibits a common axially extending cutting plane, which forms a connection surface between radial ends of the adjacent core body. The bar core comprises many axially superimposed removable single bar cores. Coolant jacket core (16) for producing a cylinder crank housing (10) with a narrow ridge width, comprises at least an integral base core (20), which comprises at least two adjacently arranged core body in hollow cylindrical section form, and a bar core (18), which interconnects the opposite radial ends of each core body in the cutting plane. Each of the two adjacently arranged core body exhibits a common axially extending cutting plane, which forms a connection surface between radial ends of the adjacent core body. The bar core comprises many axially superimposed removable single bar cores. The single bar cores are attached to the base core at the opposite radial ends of the core body arranged in the cutting plane. An independent claim is also included for producing the coolant jacket core for cylinder crank housing, comprising firing the base core, producing many single bar cores separately, and attaching single bar cores in the base core in an axially superimposed manner in the cutting plane between the two adjacent hollow cylindrical section shaped core body of the base core at the opposite radial ends of the core body.

## IPC 8 full level

**B22C 9/10** (2006.01); **F02F 1/00** (2006.01); **F02F 1/14** (2006.01); **F02F 7/00** (2006.01)

## CPC (source: EP)

**B22C 9/10** (2013.01); **B22C 9/103** (2013.01); **B22C 9/105** (2013.01); **B22C 9/108** (2013.01); **F02F 1/14** (2013.01)

## Citation (search report)

- [XA] DE 102011105388 A1 20121227 - DAIMLER AG [DE]
- [XDA] DE 102009051269 A1 20110505 - DAIMLER AG [DE]
- [X] JP H1024347 A 19980127 - TOYODA AUTOMATIC LOOM WORKS, et al
- [XA] US 2002121250 A1 20020905 - SHIMIZU YUTAKA [JP], et al

## Cited by

CN107947498A

## 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)

**DE 102013101942 B3 20140731**; EP 2772325 A2 20140903; EP 2772325 A3 20171018; EP 2772325 B1 20200603; ES 2808555 T3 20210301; HU E052288 T2 20210428; PL 2772325 T3 20210111

## DOCDB simple family (application)

**DE 102013101942 A 20130227**; EP 14151922 A 20140121; ES 14151922 T 20140121; HU E14151922 A 20140121; PL 14151922 T 20140121