

Title (en)

METHOD FOR PRODUCING A PISTON OF AN INTERNAL COMBUSTION ENGINE BY MEANS OF AN INDUCTIVE ENERGY SUPPLY AND LASER BEAM

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES KOLBENS EINER BRENNKRAFTMASCHINE MITTELS INDUKTIVER ENERGIEZUFUHR UND LASERBESTRAHLUNG

Title (fr)

PROCÉDÉ DE FABRICATION D'UN PISTON D'UN MOTEUR À COMBUSTION INTERNE À L'AIDE D'UN APPORT D'ÉNERGIE INDUCTIVE ET D'UNE IRRADIATION PAR LASER

Publication

**EP 2440365 A1 20120418 (DE)**

Application

**EP 10744675 A 20100610**

Priority

- EP 2010003474 W 20100610
- DE 102009025064 A 20090610

Abstract (en)

[origin: WO2010142439A1] The invention relates to a method for producing a piston of an internal combustion engine, wherein the piston has a combustion bowl comprising a combustion bowl rim, and the combustion bowl rim is hardened by being remelted in a first step by means of an inductive energy supply and in a further step by means of a laser beam. According to the invention, the laser beam is deflected during a rotary, progressive motion relative to the piston.

IPC 8 full level

**B23K 26/08** (2006.01); **B23K 26/10** (2006.01)

CPC (source: EP US)

**B23K 26/082** (2015.10 - EP US); **B23K 26/0823** (2013.01 - EP US); **B23K 26/10** (2013.01 - EP US); **B23K 2101/003** (2018.07 - EP US)

Citation (search report)

See references of WO 2010142439A1

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 SE SI SK SM TR

DOCDB simple family (publication)

**WO 2010142439 A1 20101216**; CN 102802863 A 20121128; DE 102009025064 A1 20110428; EP 2440365 A1 20120418; JP 2012529586 A 20121122; US 2012187110 A1 20120726

DOCDB simple family (application)

**EP 2010003474 W 20100610**; CN 201080024269 A 20100610; DE 102009025064 A 20090610; EP 10744675 A 20100610; JP 2012514384 A 20100610; US 201013377458 A 20100610