Title (en)

LIQUID-COOLED GRILL PLATE COMPRISING WEAR PLATES AND STEPPED GRILL MADE OF SUCH GRILL PLATES

Title (de)

FLÜSSIGKEITSGEKÜHLTE ROSTPLATTE MIT VERSCHLEISSPLATTEN UND AUS SOLCHEN ROSTPLATTEN BESTEHENDER STUFENROST

Title (fr)

PLAQUE DE GRILL À REFROIDISSEMENT PAR UN LIQUIDE, PRÉSENTANT DES PLAQUES D'USURE, ET GRILL À GRADINS FORMÉ DE TELLES PLAQUES DE GRILL

Publication

EP 2179220 B1 20131002 (DE)

Application

EP 08772912 A 20080811

Priority

- CH 2008000343 W 20080811
- CH 13222007 A 20070822

Abstract (en)

[origin: WO2009023977A2] The liquid-cooled grill plate has a carrier and drive design, having a separate cooling body (K) that can be placed into said carrier and drive design and permeated by the liquid and having wear plates mounted onto said cooling body. The cooling body (K) is a welded design formed by square tube sections (20-26) and profiled sections (27), said design forming continuous elongated recesses (28-30) extending across the entire extension with the exception of the square tube sections (23-26) bridging said recesses (28-30). The carrier design is a ribbed configuration made of planar steel parts that are welded together and the drive unit (15) encloses a hydraulic cylinder-piston unit, which is accommodated on the inside of a square tube (18), said tube being guided displaceably in a tunnel-like breakthrough on said ribbed configuration. Between the wear plates and the cooling body (K) a highly heat-conductive soft silicone film (31) is clamped, which ensures good heat transfer. In this way, it is ensured that during operation the wear plates always remain in the non-critical temperature range in that they are cooled by the cooling body (K) disposed beneath, which heats up to about 50ºC. Said grill plate is much easier and inexpensive to produce because the welding work is considerably reduced and less complex as a result of the use of a separate cooling body (K).

IPC 8 full level

F23G 5/00 (2006.01); **F23H 1/02** (2006.01); **F23H 3/02** (2006.01); **F23H 7/08** (2006.01); **F23H 17/02** (2006.01); **F23H 17/12** (2006.01)

CPC (source: EP US)

F23G 5/002 (2013.01 - EP US); **F23H 1/02** (2013.01 - EP US); **F23H 3/02** (2013.01 - EP US); **F23H 7/08** (2013.01 - EP US); **F23H 17/02** (2013.01 - EP US); **F23H 17/12** (2013.01 - EP US); F23G 2200/00 (2013.01 - EP US); F23G 2203/101 (2013.01 - EP US); F23H 2900/03021 (2013.01 - EP US); F23H 2900/17002 (2013.01 - US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

WO 2009023977 A2 20090226; **WO 2009023977 A3 20090618**; **WO 2009023977 A4 20090827**; BR PI0815631 A2 20150218; CA 2707954 A1 20090226; CA 2707954 C 20140520; CH 701280 B1 20101231; CN 101960220 A 20110126; CN 101960220 B 20121010; EA 016515 B1 20120530; EA 201000154 A1 20101029; EP 2179220 A2 20100428; EP 2179220 B1 20131002; JP 2010537150 A 20101202; JP 5380448 B2 20140108; KR 20100061683 A 20100608; PL 2179220 T3 20140430; US 2011232623 A1 20110929; US 8590465 B2 20131126

DOCDB simple family (application)

CH 2008000343 W 20080811; BR PI0815631 A 20080811; CA 2707954 A 20080811; CH 13222007 A 20070822; CN 200880112724 A 20080811; EA 201000154 A 20080811; EP 08772912 A 20080811; JP 2010521275 A 20080811; KR 20107005792 A 20080811; PL 08772912 T 20080811; US 67353708 A 20080811