

Title (en)
ISOSTATIC PRESS CAPABLE OF PERFORMING HEATING AND COOLING AND METHOD FOR MANUFACTURING CHIP COMPONENT USING SAME

Title (de)
ISOSTATISCHE PRESSE MIT FÄHIGKEIT ZUM HEIZEN UND KÜHLEN UND VERFAHREN ZUR HERSTELLUNG EINER CHIPKOMPONENTE DAMIT

Title (fr)
PRESSE ISOSTATIQUE POUVANT EFFECTUER UN CHAUFFAGE ET UN REFROIDISSEMENT ET PROCÉDÉ POUR LA FABRICATION DE COMPOSANT DE PUCE UTILISANT CETTE DERNIÈRE

Publication
EP 3130415 A4 20180110 (EN)

Application
EP 14889166 A 20140703

Priority
• KR 20140043427 A 20140411
• KR 2014005936 W 20140703

Abstract (en)
[origin: EP3130415A1] Disclosed is an isostatic press capable of carrying out compression molding using a fluid or a gas filled in a pressure vessel. The isostatic press having the pressure vessel having an accommodation chamber for receiving a workpiece therein, in which the accommodation chamber is filled with a pressure medium to apply isostatic gas pressure to the workpiece, includes a heat exchanger including a heat exchange member which is installed to the accommodation vessel and transfers heat between the pressure medium and the heat exchange member to heat or cool the pressure medium supplied to the accommodation chamber. Accordingly, the isostatic press can heat or cool the workpiece in a short time, thereby obtaining the workpiece having a dense structure and minimizing a fraction defective of the workpiece.

IPC 8 full level
B22F 3/00 (2006.01); **B22F 3/04** (2006.01); **B22F 3/15** (2006.01); **B30B 11/00** (2006.01)

CPC (source: EP KR)
B22F 3/04 (2013.01 - EP KR); **B22F 3/15** (2013.01 - EP KR); **B30B 11/002** (2013.01 - EP KR); **B22F 2003/153** (2013.01 - EP KR); **B22F 2999/00** (2013.01 - EP KR)

Citation (search report)
• [XYI] WO 2012092961 A1 20120712 - AVURE TECHNOLOGIES AB [SE], et al
• [XYI] WO 2014031485 A1 20140227 - OHIO STATE INNOVATION FOUNDATION [US]
• [XY] US 4280807 A 19810728 - SMITH JR CHARLES W, et al
• [X] JP S51124610 A 19761030 - KOBE STEEL LTD
• [A] US 2003197295 A1 20031023 - NAKAI TOMOMITSU [JP], et al
• See references of WO 2015156447A1

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 3130415 A1 20170215; EP 3130415 A4 20180110; EP 3130415 B1 20210331; CN 106163702 A 20161123; CN 106163702 B 20180807; ES 2869931 T3 20211026; HU E055601 T2 20211228; JP 2017513718 A 20170601; JP 6293362 B2 20180314; KR 101708490 B1 20170221; KR 20150117829 A 20151021; PL 3130415 T3 20211025; WO 2015156447 A1 20151015

DOCDB simple family (application)
EP 14889166 A 20140703; CN 201480077938 A 20140703; ES 14889166 T 20140703; HU E14889166 A 20140703; JP 2017505433 A 20140703; KR 20140043427 A 20140411; KR 2014005936 W 20140703; PL 14889166 T 20140703