

Title (en)

METHOD FOR ADDITIVE MANUFACTURING OF A WALL FOR A TURBINE ENGINE, COMPRISING AT LEAST ONE COOLING APERTURE

Title (de)

VERFAHREN ZUR GENERATIVEN FERTIGUNG EINER WAND FÜR EINEN TURBINENMOTOR MIT MINDESTENS EINER KÜHLÖFFNUNG

Title (fr)

PROCÉDÉ DE FABRICATION ADDITIVE D'UNE PAROI POUR TURBOMACHINE, COMPRENANT AU MOINS UN ORIFICE DE REFROIDISSEMENT

Publication

EP 4110540 A1 20230104 (FR)

Application

EP 21721147 A 20210326

Priority

- FR 2003347 A 20200403
- FR 2003348 A 20200403
- FR 2021050532 W 20210326

Abstract (en)

[origin: WO2021198598A1] The invention relates to a method for the additive manufacturing of a wall (10) for a turbine engine, the wall (10) comprising a first cooling aperture (40). The manufacturing method comprises the additive manufacturing of the wall (10) by selective melting or selective sintering on a powder bed. The wall (10) is manufactured at least partially around the first cooling aperture (40) with at least one lower region (19a) that has a minimum length (La) of between 0.01 and 0.4 mm and/or with a lower region (19a) that has a total thickness (ea) of between 0.06 and 0.22 mm.

IPC 8 full level

B22F 3/105 (2006.01); **B22F 5/00** (2006.01); **B22F 5/04** (2006.01); **B22F 10/28** (2021.01); **B22F 10/366** (2021.01); **B22F 10/38** (2021.01); **B33Y 10/00** (2015.01); **B33Y 50/02** (2015.01); **F23R 3/00** (2006.01); **F23R 3/06** (2006.01); **F23R 3/50** (2006.01)

CPC (source: EP US)

B22F 5/009 (2013.01 - EP US); **B22F 5/04** (2013.01 - EP); **B22F 10/28** (2021.01 - EP US); **B22F 10/366** (2021.01 - EP); **B22F 10/385** (2021.01 - EP); **B33Y 10/00** (2014.12 - EP); **B33Y 50/02** (2014.12 - EP); **F23R 3/002** (2013.01 - EP US); **F23R 3/06** (2013.01 - EP); **F23R 3/50** (2013.01 - EP); **B33Y 10/00** (2014.12 - US); **B33Y 80/00** (2014.12 - US); **F23R 2900/00018** (2013.01 - EP US); **F23R 2900/03042** (2013.01 - US); **Y02P 10/25** (2015.11 - EP); **Y02T 50/60** (2013.01 - EP)

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

WO 2021198598 A1 20211007; CN 115697589 A 20230203; EP 4110540 A1 20230104; US 2024009733 A1 20240111

DOCDB simple family (application)

FR 2021050532 W 20210326; CN 202180036715 A 20210326; EP 21721147 A 20210326; US 202117995203 A 20210326