

Title (en)

HEATING APPARATUS FOR PERFORMING LOCALISED THERMAL ACTIVATION OF A COMPOSITE PART

Title (de)

HEIZVORRICHTUNG ZUR DURCHFÜHRUNG EINER LOKALISIERTEN THERMISCHEN AKTIVIERUNG EINES VERBUNDETEILS

Title (fr)

APPAREIL DE CHAUFFAGE POUR RÉALISER UNE ACTIVATION THERMIQUE LOCALISÉE D'UNE PIÈCE COMPOSITE

Publication

EP 4347213 A1 20240410 (FR)

Application

EP 22729604 A 20220518

Priority

- FR 2105421 A 20210525
- EP 2022063471 W 20220518

Abstract (en)

[origin: WO2022248315A1] The invention relates to a heating apparatus (1) for performing localised thermal activation of a predetermined zone (Z) of a thermoplastic polymer matrix composite part (P), comprising: - a heating device (2) with infrared emitter(s) (6), - a mask (3) comprising at least one perforated zone (4), the mask (3) being arranged relative to the composite part (P) without contacting said part and so as to at least partially superimpose said at least one perforated zone (4) with said predetermined zone (Z), the mask (3) being positioned between the composite part (P) and the heating device (2), - an element (5) for controlling the heating device (2), the apparatus (1) being configured to allow localised thermal activation of said predetermined zone (Z) through said mask (3) at a temperature at least equal to the melting temperature of the thermoplastic polymer and also to preserve the other zones (Za) of the composite part (P) from its deconsolidation temperature.

IPC 8 full level

B29C 35/02 (2006.01); **B29C 33/06** (2006.01); **B29C 35/08** (2006.01); **B29C 45/14** (2006.01); **B29C 45/73** (2006.01)

CPC (source: EP)

B29C 33/06 (2013.01); **B29C 35/0266** (2013.01); **B29C 35/0805** (2013.01); **B29C 35/0894** (2013.01); **B29C 35/0288** (2013.01); **B29C 2035/0283** (2013.01); **B29C 2035/0822** (2013.01); **B29C 2045/14286** (2013.01); **B29C 2045/14877** (2013.01); **B29C 2045/7343** (2013.01)

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 2022248315 A1 20221201; EP 4347213 A1 20240410; FR 3123245 A1 20221202; FR 3123245 B1 20240119

DOCDB simple family (application)

EP 2022063471 W 20220518; EP 22729604 A 20220518; FR 2105421 A 20210525