

Title (en)  
BLUE LASER METAL ADDITIVE MANUFACTURING SYSTEM

Title (de)  
GENERATIVES FERTIGUNGSSYSTEM FÜR METALL MIT BLAUEM LASER

Title (fr)  
SYSTÈME DE FABRICATION ADDITIVE DE MÉTAL AVEC UN LASER BLEU

Publication  
**EP 3840911 A2 20210630 (EN)**

Application  
**EP 19851630 A 20190824**

Priority

- US 201862722198 P 20180824
- US 201862726233 P 20180901
- US 2019048049 W 20190824

Abstract (en)  
[origin: WO2020041786A2] A high-resolution additive manufacturing system based on a parallel printing method using a spatial light modulator. A method and system for additive manufacturing using a DMD in the laser beam path. The use of a pre-heat laser beam in combination with a build laser beam having a DMD along the build laser beam path.

IPC 8 full level  
**B23K 26/342** (2014.01); **B33Y 10/00** (2015.01); **B33Y 30/00** (2015.01)

CPC (source: CN EP KR US)  
**B22F 3/105** (2013.01 - KR); **B22F 3/24** (2013.01 - KR); **B22F 10/25** (2021.01 - CN); **B22F 10/28** (2021.01 - EP KR US); **B22F 10/30** (2021.01 - CN); **B22F 10/362** (2021.01 - EP US); **B22F 10/364** (2021.01 - EP US); **B22F 10/368** (2021.01 - EP US); **B22F 10/85** (2021.01 - EP US); **B22F 12/00** (2021.01 - CN); **B22F 12/13** (2021.01 - EP US); **B22F 12/17** (2021.01 - EP US); **B22F 12/20** (2021.01 - EP US); **B22F 12/30** (2021.01 - EP US); **B22F 12/41** (2021.01 - CN); **B22F 12/42** (2021.01 - EP US); **B22F 12/43** (2021.01 - KR); **B22F 12/45** (2021.01 - CN EP US); **B22F 12/47** (2021.01 - EP US); **B22F 12/52** (2021.01 - EP US); **B22F 12/60** (2021.01 - EP US); **B22F 12/70** (2021.01 - CN); **B22F 12/90** (2021.01 - CN EP US); **B23K 26/0608** (2013.01 - EP); **B23K 26/0853** (2013.01 - KR); **B23K 26/342** (2015.10 - EP KR); **B23K 26/702** (2015.10 - KR); **B29C 64/153** (2017.07 - EP); **B29C 64/245** (2017.07 - EP); **B29C 64/268** (2017.07 - EP); **B29C 64/295** (2017.07 - EP); **B29C 64/371** (2017.07 - EP); **B33Y 10/00** (2014.12 - EP); **B33Y 30/00** (2014.12 - CN EP US); **B33Y 40/00** (2014.12 - CN); **B22F 10/36** (2021.01 - EP US); **B22F 12/41** (2021.01 - EP US); **B22F 2999/00** (2013.01 - EP); **Y02P 10/25** (2015.11 - EP)

Cited by  
EP4054781A4

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

DOCDB simple family (publication)  
**WO 2020041786 A2 20200227**; **WO 2020041786 A3 20200409**; CA 3110635 A1 20200227; CN 113226628 A 20210806; CN 113226628 B 20230620; CN 116638102 A 20230825; EP 3840911 A2 20210630; EP 3840911 A4 20220601; JP 2022500249 A 20220104; KR 102586306 B1 20231006; KR 20210056358 A 20210518; KR 20230142818 A 20231011

DOCDB simple family (application)  
**US 2019048049 W 20190824**; CA 3110635 A 20190824; CN 201980069449 A 20190824; CN 202310626593 A 20190824; EP 19851630 A 20190824; JP 2021510376 A 20190824; KR 20217008566 A 20190824; KR 20237033515 A 20190824