

Title (en)  
ADDITIVE MANUFACTURING SYSTEM WITH ADDRESSABLE ARRAY OF LASERS AND REAL TIME FEEDBACK CONTROL OF EACH SOURCE

Title (de)  
SYSTEM ZUR GENERATIVEN FERTIGUNG MIT ADRESSIERBARER ANORDNUNG VON LASERN UND ECHTZEITRÜCKKOPPLUNGSSTEUERUNG EINER JEDEN QUELLE

Title (fr)  
SYSTÈME DE FABRICATION ADDITIVE AVEC RÉSEAU ADRESSABLE DE LASERS ET COMMANDE DE RÉTROACTION EN TEMPS RÉEL DE CHAQUE SOURCE

Publication  
**EP 3843978 A1 20210707 (EN)**

Application  
**EP 19856250 A 20190901**

Priority  
• US 201862726234 P 20180901  
• US 2019049251 W 20190901

Abstract (en)  
[origin: WO2020047526A1] There is provided assemblies for combining a group of laser sources into a combined laser beam. There is further provided a blue diode laser array that combines the laser beams from an assembly of blue laser diodes. There are provided laser processing operations and applications using the combined blue laser beams from the laser diode arrays and modules.

IPC 8 full level  
**B29C 64/153** (2017.01); **B22F 3/10** (2006.01); **B29C 64/268** (2017.01); **B29C 67/04** (2017.01); **B33Y 10/00** (2015.01); **B33Y 30/00** (2015.01); **B33Y 50/02** (2015.01)

CPC (source: EP KR US)  
**B22F 10/28** (2021.01 - KR); **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 KR US); **B22F 12/43** (2021.01 - EP US); **B22F 12/47** (2021.01 - EP US); **B23K 26/0608** (2013.01 - EP); **B23K 26/342** (2015.10 - EP); **B29C 64/153** (2017.08 - EP KR US); **B29C 64/268** (2017.08 - EP KR); **B29C 64/282** (2017.08 - EP KR); **B29C 64/393** (2017.08 - EP KR); **B33Y 10/00** (2014.12 - EP KR); **B33Y 30/00** (2014.12 - EP KR); **B33Y 50/02** (2014.12 - EP KR); **B33Y 70/00** (2014.12 - KR); **C22C 1/0416** (2013.01 - KR); **C22C 1/0425** (2013.01 - KR); **C22C 1/0466** (2013.01 - EP KR); **B22F 10/28** (2021.01 - EP US); **B22F 10/32** (2021.01 - EP US); **B22F 10/36** (2021.01 - EP US); **B22F 10/38** (2021.01 - EP US); **B22F 10/64** (2021.01 - EP US); **B22F 12/13** (2021.01 - EP US); **B22F 12/41** (2021.01 - EP US); **B22F 12/44** (2021.01 - EP US); **B22F 12/45** (2021.01 - EP US); **B22F 12/46** (2021.01 - EP US); **B22F 12/52** (2021.01 - EP US); **B22F 12/63** (2021.01 - EP US); **B22F 12/90** (2021.01 - EP US); **B22F 2301/052** (2013.01 - KR); **B22F 2301/10** (2013.01 - KR); **B22F 2301/255** (2013.01 - KR); **Y02P 10/25** (2015.11 - 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

DOCDB simple family (publication)  
**WO 2020047526 A1 20200305**; CA 3111199 A1 20200305; CN 112955303 A 20210611; CN 112955303 B 20230818; CN 116786846 A 20230922; EP 3843978 A1 20210707; EP 3843978 A4 20220601; JP 2022503614 A 20220112; KR 20210058858 A 20210524

DOCDB simple family (application)  
**US 2019049251 W 20190901**; CA 3111199 A 20190901; CN 201980071257 A 20190901; CN 202310952844 A 20190901; EP 19856250 A 20190901; JP 2021510932 A 20190901; KR 20217009277 A 20190901