

Title (en)

COLOR AND/OR OPACITY CHANGING LIQUID RADIATION CURABLE RESINS FOR ADDITIVE FABRICATION

Title (de)

FARB- UND/ODER OPAZITÄTSVERÄNDERNDE, FLÜSSIGE STRAHLUNGSHÄRTBARE HARZE ZUR GENERATIVEN FERTIGUNG

Title (fr)

RÉSINES LIQUIDES VULCANISABLES PAR RAYONNEMENT CHANGEANT DE COULEUR ET/OU D'OPACITÉ POUR LA FABRICATION ADDITIVE

Publication

EP 3122529 A1 20170201 (EN)

Application

EP 15770401 A 20150325

Priority

- US 201461970435 P 20140326
- US 2015022407 W 20150325

Abstract (en)

[origin: WO2015148613A1] Color and/or opacity changing liquid radiation curable resins are herein described, along with methods for using the same in additive fabrication processes. Described and claimed are methods for improving additive fabrication build processes by controlling, at least temporarily, the depth of penetration of a liquid radiation curable resin. The liquid radiation curable resins herein described are capable of curing into three-dimensional articles having a certain amount of color and/or opacity. The resulting three-dimensional articles possess an ability to further change in color and/or opacity, and possess excellent mechanical properties. Also herein described are the three-dimensional articles formed according to the methods of the invention.

IPC 8 full level

B29C 35/08 (2006.01); **B41M 5/28** (2006.01); **G03F 7/105** (2006.01)

CPC (source: EP US)

B29C 35/0805 (2013.01 - EP US); **B29C 64/124** (2017.07 - EP); **B33Y 70/00** (2014.12 - EP US); **G03F 7/0037** (2013.01 - EP); **G03F 7/105** (2013.01 - EP); **G03F 7/168** (2013.01 - EP); **B29C 2035/0833** (2013.01 - EP); **B29K 2995/0021** (2013.01 - EP)

Cited by

EP3248992A4; US10294310B2

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 2015148613 A1 20151001; CN 106132655 A 20161116; EP 3122529 A1 20170201; EP 3122529 A4 20171122; JP 2017513729 A 20170601

DOCDB simple family (application)

US 2015022407 W 20150325; CN 201580015983 A 20150325; EP 15770401 A 20150325; JP 2016552534 A 20150325