

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

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Application

EP 15770401 A 20150325

Priority

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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

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Citation (search report)

- [XY] EP 2526463 A1 20121128 - DSM IP ASSETS BV [NL]
- [Y] EP 0203613 A2 19861203 - FUJI PHOTO FILM CO LTD [JP]
- See references of WO 2015148613A1

Cited by

EP3248992A4; US10294310B2

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