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B22F 3/00 (2006.01) *B33Y 50/02* (2015.01)
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(54) Title: GAS FLOW IN THREE-DIMENSIONAL PRINTING

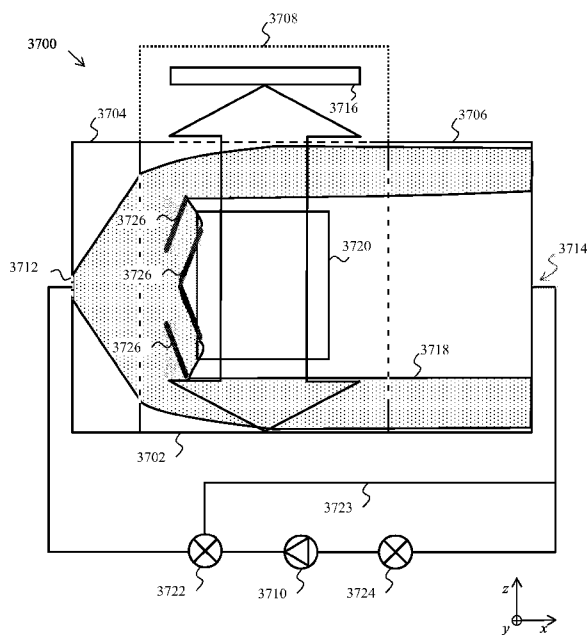


Fig. 37

(57) Abstract: The present disclosure provides three-dimensional (3D) printing processes, apparatuses, software, and systems for controlling and/or treating gas borne debris in an atmosphere of a 3D printer.



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OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA,
SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN,
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International application No.
PCT/US2017/060035**A. CLASSIFICATION OF SUBJECT MATTER****B29C 64/393(2017.01)i, B29C 64/357(2017.01)i, B22F 3/00(2006.01)i, B28B 1/00(2006.01)i, B01D 46/00(2006.01)i, B33Y 40/00(2015.01)i, B33Y 50/02(2015.01)i**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

B29C 64/393; B01D 50/00; B29C 67/00; B33Y 40/00; B05D 5/02; G01D 11/00; B22F 3/105; B01D 46/00; B29C 64/357; B22F 3/00; B28B 1/00; B33Y 50/02

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models
Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: printing, three dimensional object, gas flow controller, platform, pre-transformed material, layer forming apparatus

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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| Y | EP 2992942 A1 (SLM SOLUTIONS GROUP AG) 09 March 2016 See paragraphs [0007], [0011], [0016], [0037], [0043]; claims 1, 7; and figure 1. | 1-36 |
| Y | US 2004-0005182 A1 (GAYLO, CHRISTOPHER M. et al.) 08 January 2004 See the whole document. | 1-36 |
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| A | US 2010-0215856 A1 (KRITCHMAN, ELIAHU M.) 26 August 2010 See the whole document. | 1-36 |

 Further documents are listed in the continuation of Box C. See patent family annex.

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Information on patent family members

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