



US00D760825S

(12) **United States Design Patent**
Solorzano et al.

(10) **Patent No.:** **US D760,825 S**
(45) **Date of Patent:** **** Jul. 5, 2016**

(54) **BIOPRINTER**

(71) Applicants: **Ricardo D. Solorzano**, Philadelphia, PA (US); **Sohaib K. Hashmi**, Philadelphia, PA (US); **Daniel Cabrera**, Philadelphia, PA (US)

(72) Inventors: **Ricardo D. Solorzano**, Philadelphia, PA (US); **Sohaib K. Hashmi**, Philadelphia, PA (US); **Daniel Cabrera**, Philadelphia, PA (US)

(73) Assignee: **BioBots, Inc.**, Philadelphia, PA (US)

(**) Term: **14 Years**

(21) Appl. No.: **29/521,622**

(22) Filed: **Mar. 25, 2015**

(51) **LOC (10) Cl.** **15-09**

(52) **U.S. Cl.**
USPC **D15/122; D15/135**

(58) **Field of Classification Search**
USPC **D15/122, 135; D18/6-7, 14, 19, 50, D18/54.1, 55**
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D446,826 S *	8/2001	Dunn et al.	D21/398
D514,556 S *	2/2006	Rising	D14/300
7,297,304 B2 *	11/2007	Swanson et al.	264/308
D616,045 S *	5/2010	Tervo	D21/499
D677,723 S *	3/2013	Buel et al.	D18/59
D681,548 S *	5/2013	Zhang et al.	D13/102
D688,741 S *	8/2013	Joyce	D18/50
D698,869 S *	2/2014	Strzelewicz et al.	D21/499
D711,463 S *	8/2014	Costabeber	D18/50
D730,979 S *	6/2015	Anantha et al.	D18/50
D732,586 S *	6/2015	Chen et al.	D15/122
D732,587 S *	6/2015	Hsu et al.	D15/122
D732,588 S *	6/2015	Lin et al.	D15/122
D733,196 S *	6/2015	Wolf et al.	D15/122

D734,788 S *	7/2015	Reches et al.	D15/122
D734,814 S *	7/2015	Yeh et al.	D18/50
D737,345 S *	8/2015	Anantha et al.	D15/122
D737,346 S *	8/2015	Anantha et al.	D15/122
D739,885 S *	9/2015	Lee et al.	D15/122
D740,863 S *	10/2015	Kemperle et al.	D15/122
D745,069 S *	12/2015	Kemperle et al.	D15/122
D745,903 S *	12/2015	Armani	D15/122
2003/0175410 A1	9/2003	Campbell et al.	

(Continued)

FOREIGN PATENT DOCUMENTS

GB	2478801 A	9/2011
WO	WO 2006/020685	2/2006

(Continued)

OTHER PUBLICATIONS

Fairbanks, et al. "Photoinitiated Polymerization of PEG-Diacrylate with Lithium Phenyl-2,4,6-Trimethylbenzoylphosphinate: Polymerization Rate and Cytocompatibility", *Biomaterials*, 30(35), Dec. 2009, 6702-6707.

(Continued)

Primary Examiner — Patricia Palasik
(74) *Attorney, Agent, or Firm* — Baker & Hostetler LLP

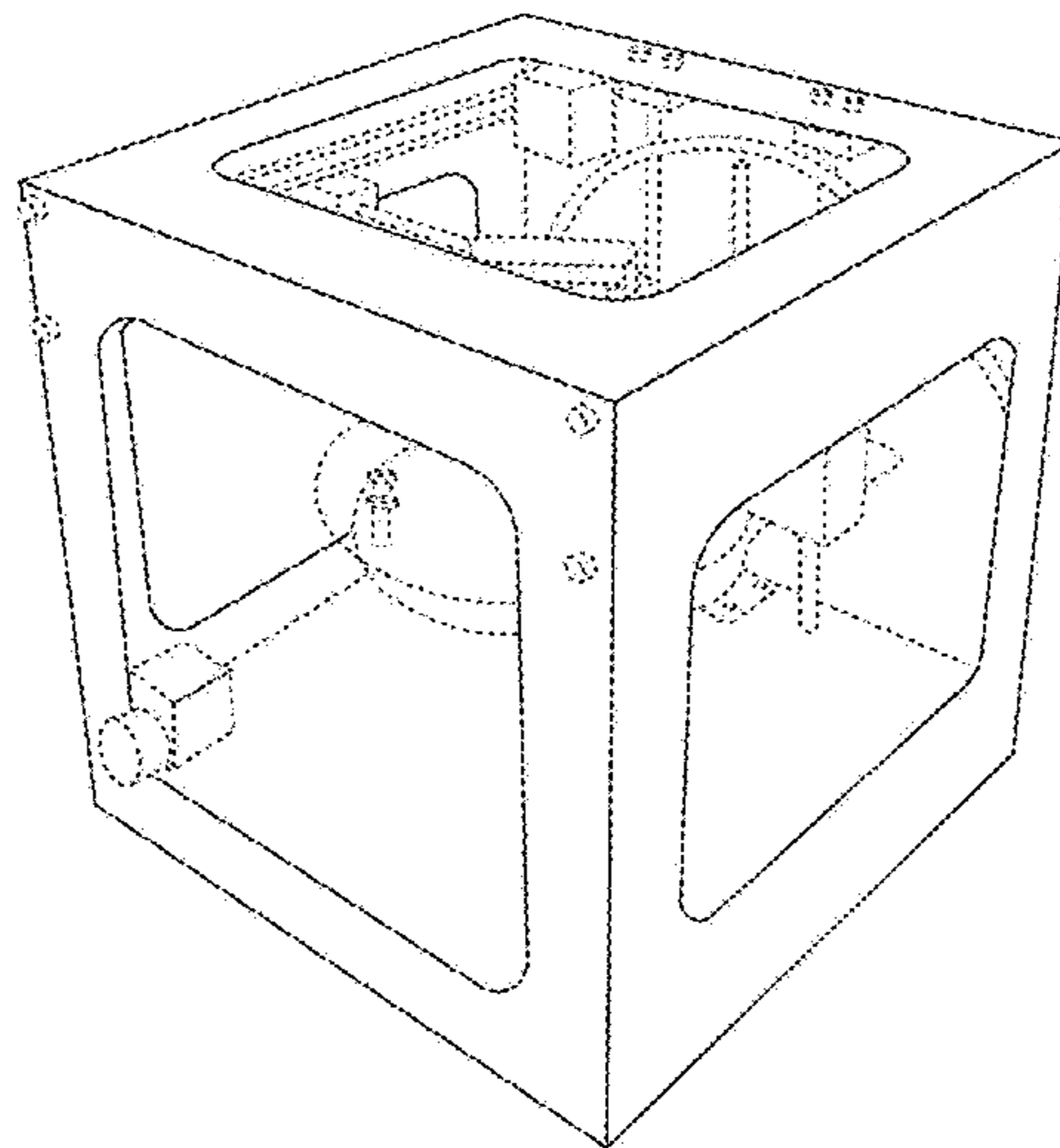
(57) **CLAIM**

The ornamental design for a bioprinter, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a bioprinter of the present invention.
FIG. 2 is a side view of the bioprinter of FIG. 1.
FIG. 3 is a top view of the bioprinter of FIG. 1.
FIG. 4 is a first side view of the bioprinter of FIG. 1; and, FIG. 5 is a second side view of the bioprinter of FIG. 1.
Broken lines are for illustrative purposes only and are not intended to limit the claimed design.

1 Claim, 5 Drawing Sheets



(56)

References Cited

OTHER PUBLICATIONS

U.S. PATENT DOCUMENTS

2010/0208006 A1 8/2010 Selinfreund
2011/0212501 A1 9/2011 Yoo
2012/0089238 A1 4/2012 Kang et al.
2013/0017564 A1 1/2013 Guillemot et al.
2014/0043630 A1* 2/2014 Buser et al. 358/1.13
2014/0093932 A1 4/2014 Murphy et al.
2015/0037445 A1 2/2015 Murphy et al.

FOREIGN PATENT DOCUMENTS

WO WO 2010/030964 A2 3/2010
WO WO 2013/158508 A1 10/2013

Gramlich, et al., "Transdermal Gelation of Methacrylated Macromers with Near-Infrared Light and Gold Nanorods", Nanotechnology, 25(1), Dec. 2013, 8 pgs.
International Patent Application No. PCT/US15/22458: International Search Report dated Mar. 25, 2015, 27 pages.

* cited by examiner

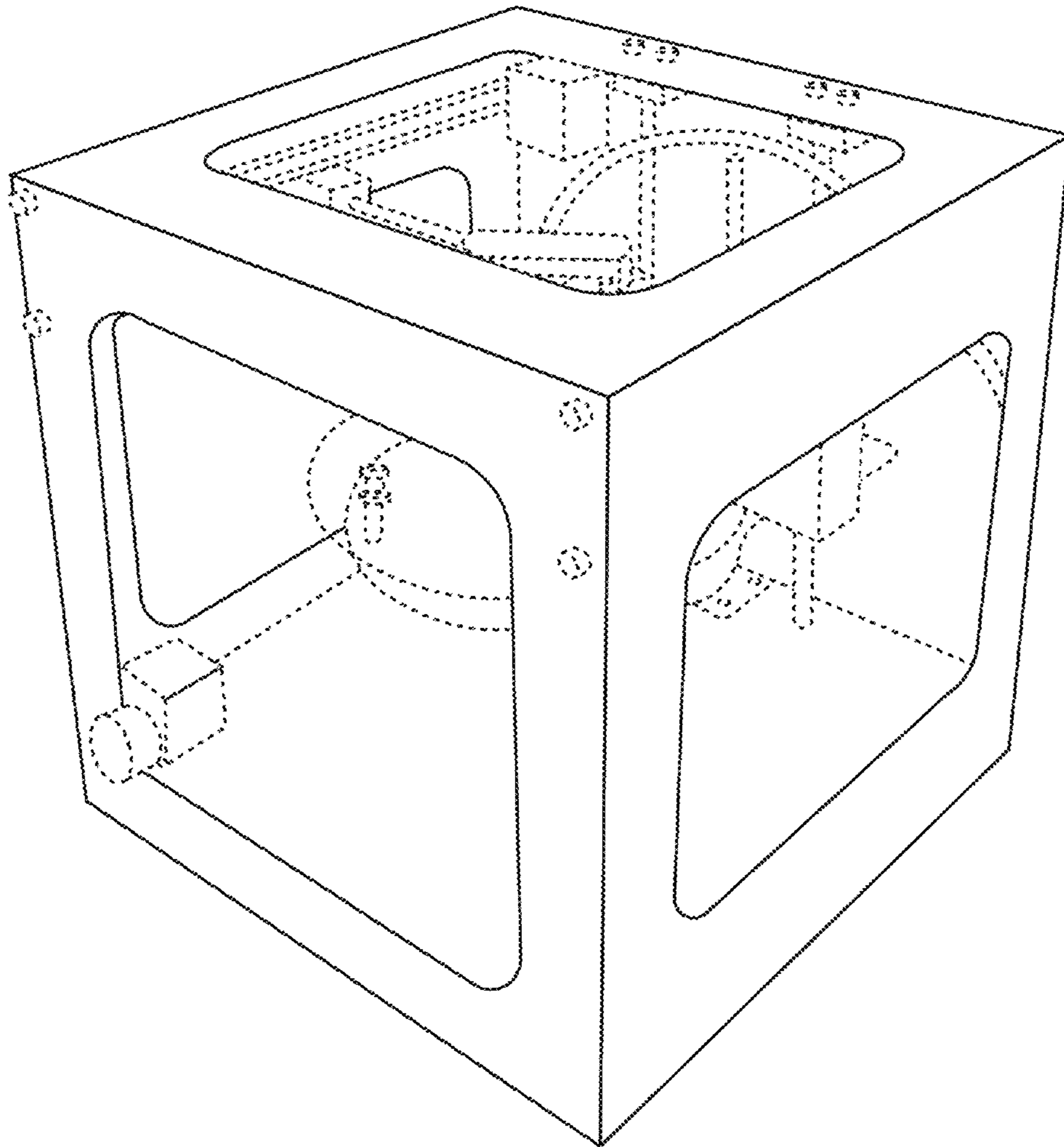


Figure 1

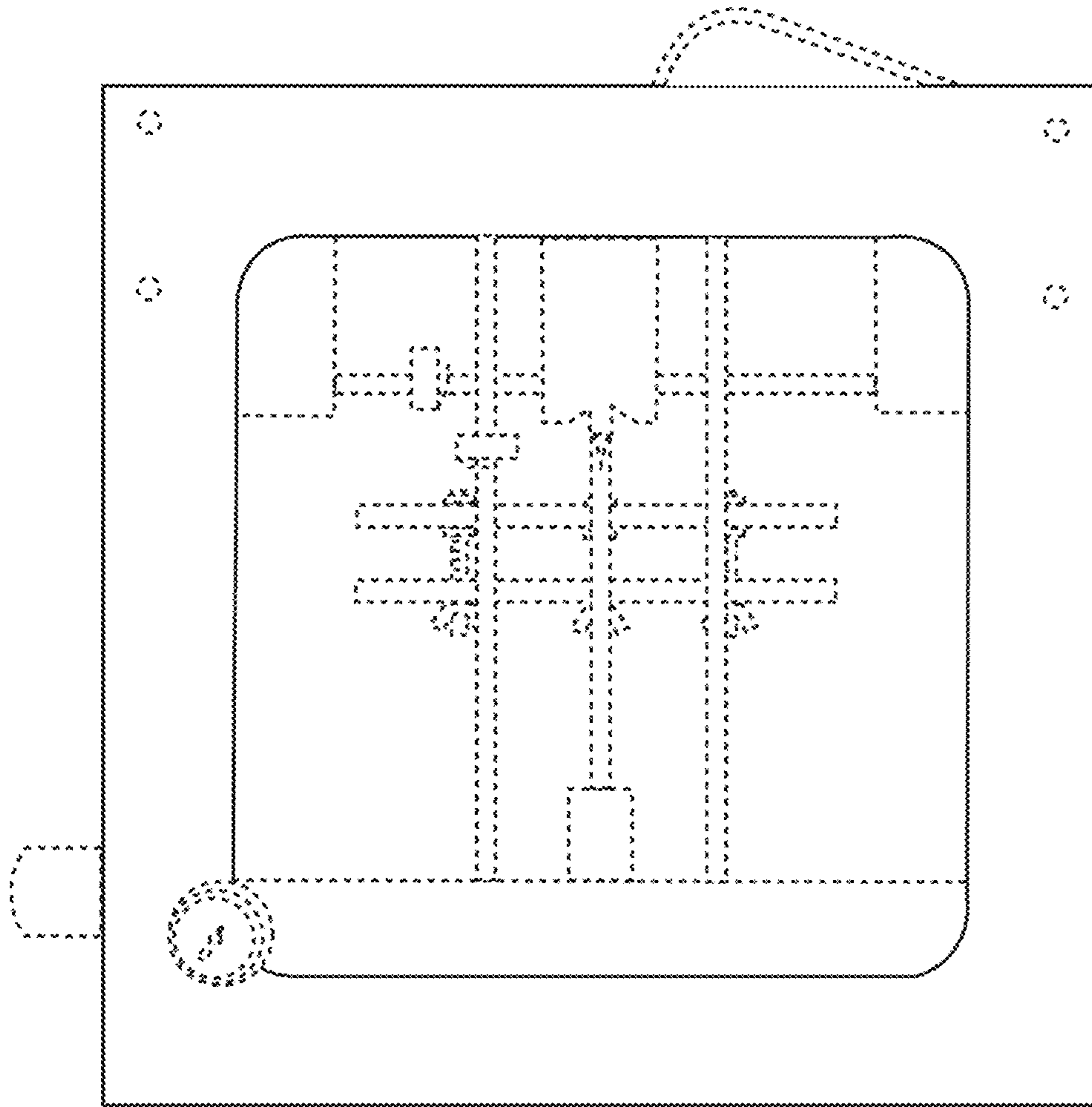


Figure 2

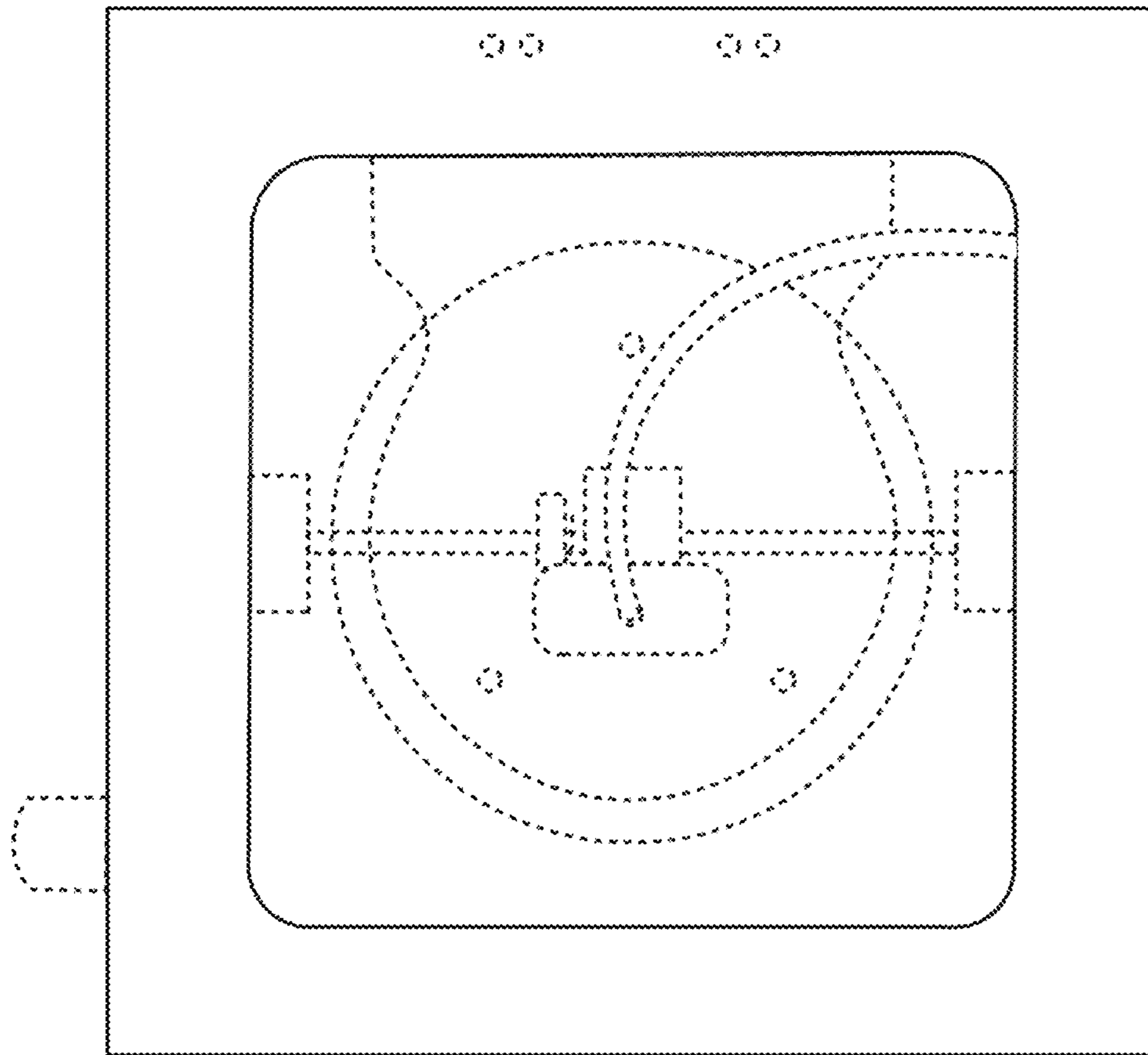


Figure 3

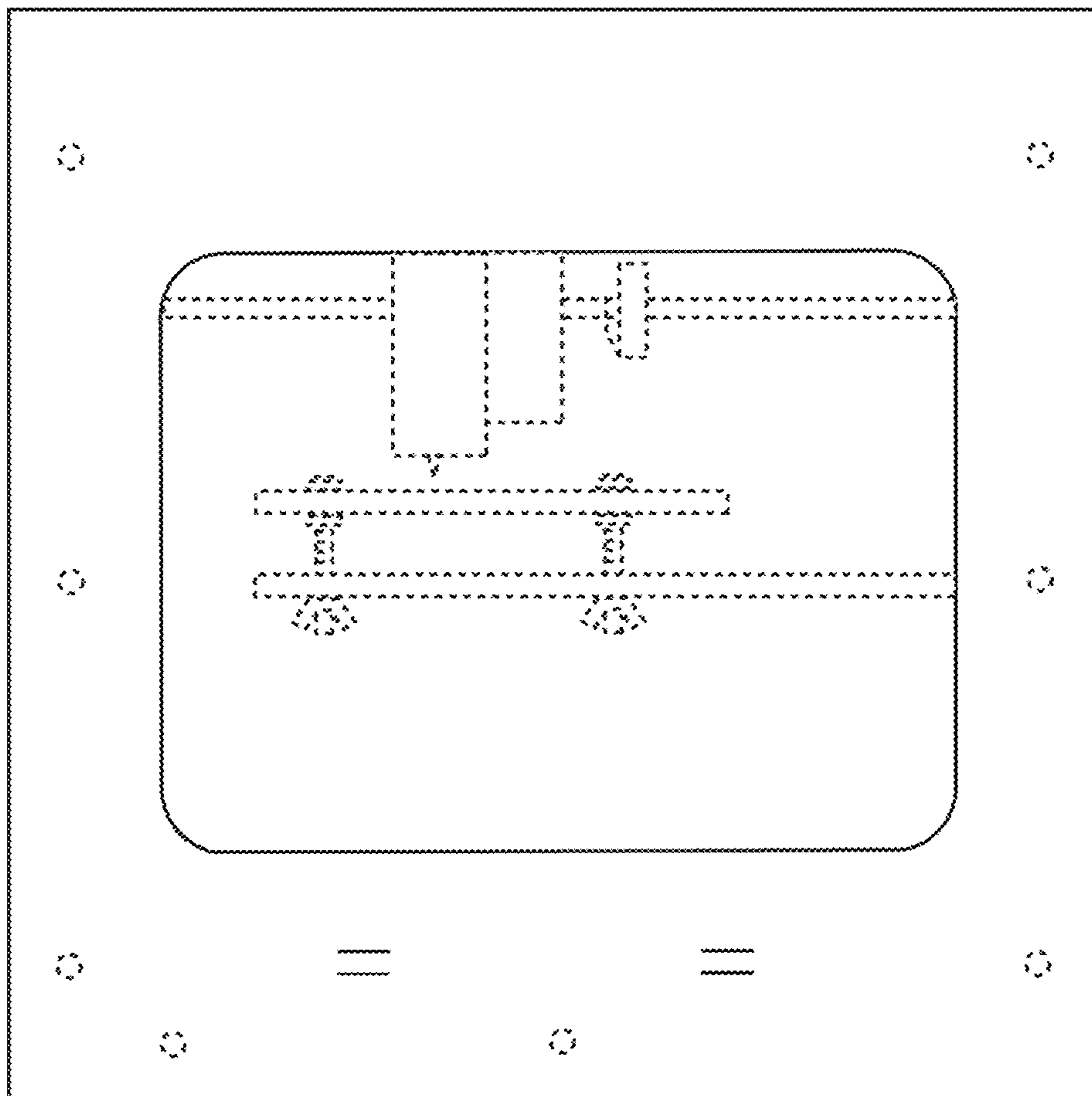


Figure 4

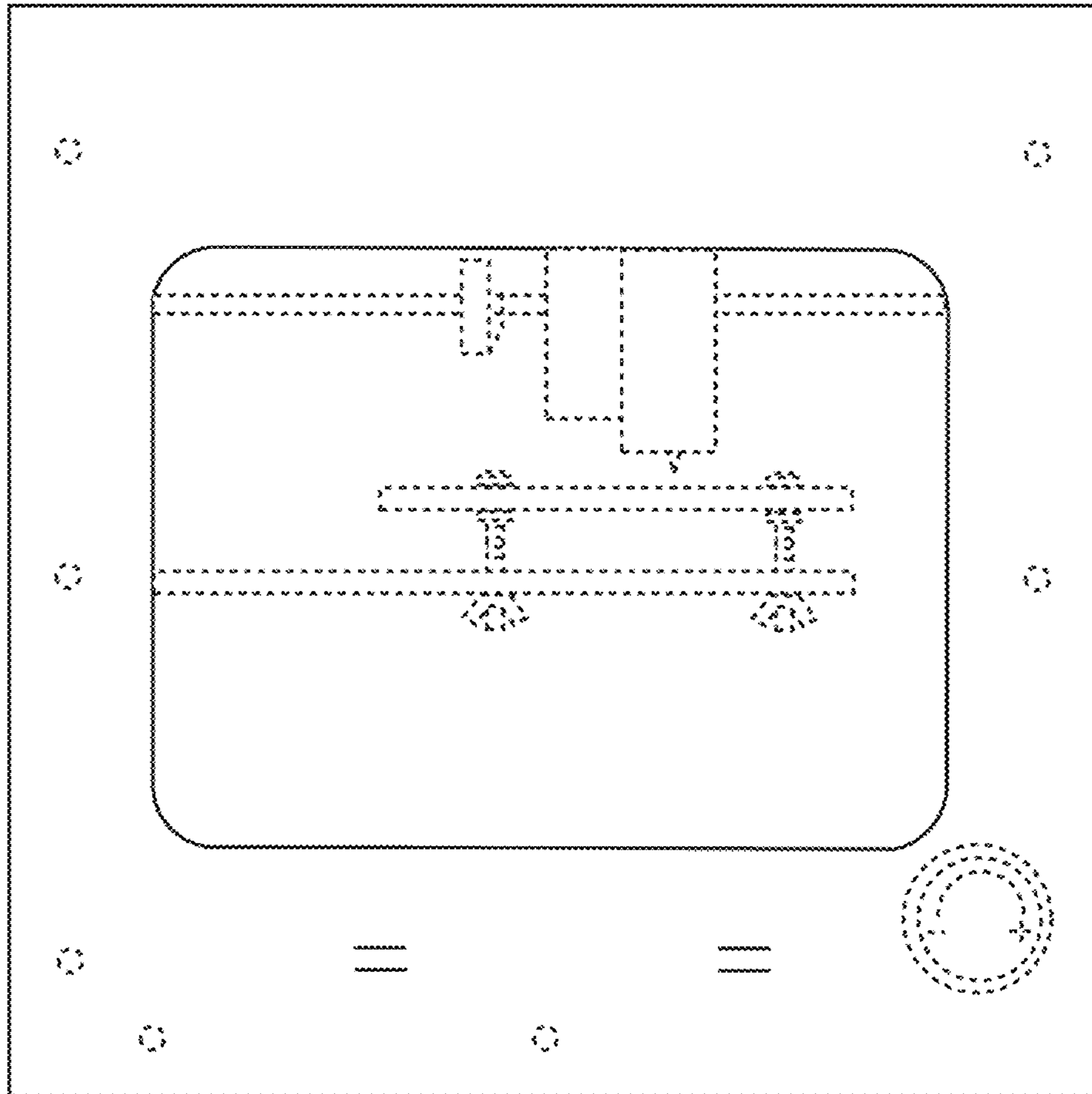


Figure 5