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(12) **United States Design Patent**
Hosaka

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(54) **PAIR OF STAGE ARMS FOR A SEMICONDUCTOR WAFER DELIVERY APPARATUS**

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(73) Assignee: **Tokyo Electron Limited**, Tokyo (JP)

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

(21) Appl. No.: **29/242,545**

(22) Filed: **Nov. 14, 2005**

(30) **Foreign Application Priority Data**

Aug. 12, 2005 (JP) 2005-023559

(51) **LOC (8) Cl.** **13-03**

(52) **U.S. Cl.** **D13/182**

(58) **Field of Classification Search** D13/182;
134/110; 396/611; 414/331.15, 411, 416.03;
700/213

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,636,960	A *	6/1997	Hiroki et al.	414/781
5,740,059	A *	4/1998	Hirata et al.	700/213
5,772,386	A *	6/1998	Mages et al.	414/411
5,826,129	A *	10/1998	Hasebe et al.	396/611
6,132,160	A *	10/2000	Iwai	414/416.03
6,234,738	B1 *	5/2001	Kimata et al.	414/416.03
6,811,370	B2 *	11/2004	Buermann	414/416.03
6,846,149	B2 *	1/2005	Savage et al.	414/416.03
7,033,126	B2 *	4/2006	Van Den Berg	414/416.03
2002/0044860	A1 *	4/2002	Hayashi et al.	414/416.03

2002/0182040	A1 *	12/2002	Kimura et al.	414/331.04
2002/0197138	A1 *	12/2002	Cho et al.	414/416.03
2003/0133776	A1 *	7/2003	Lee	414/416.03
2004/0265100	A1 *	12/2004	Ohkawara et al.	414/416.03
2005/0220581	A1 *	10/2005	Chuang et al.	414/416.03
2007/0031222	A1 *	2/2007	Hosaka et al.	414/416.03

* cited by examiner

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(57) **CLAIM**

The ornamental design for a pair of stage arms for a semiconductor wafer delivery apparatus, as shown and described.

DESCRIPTION

FIG. 1 is a top plan view of a pair of stage arms for a semiconductor wafer delivery apparatus showing our new design;

FIG. 2 is a front elevation view thereof;

FIG. 3 is a bottom plan view thereof;

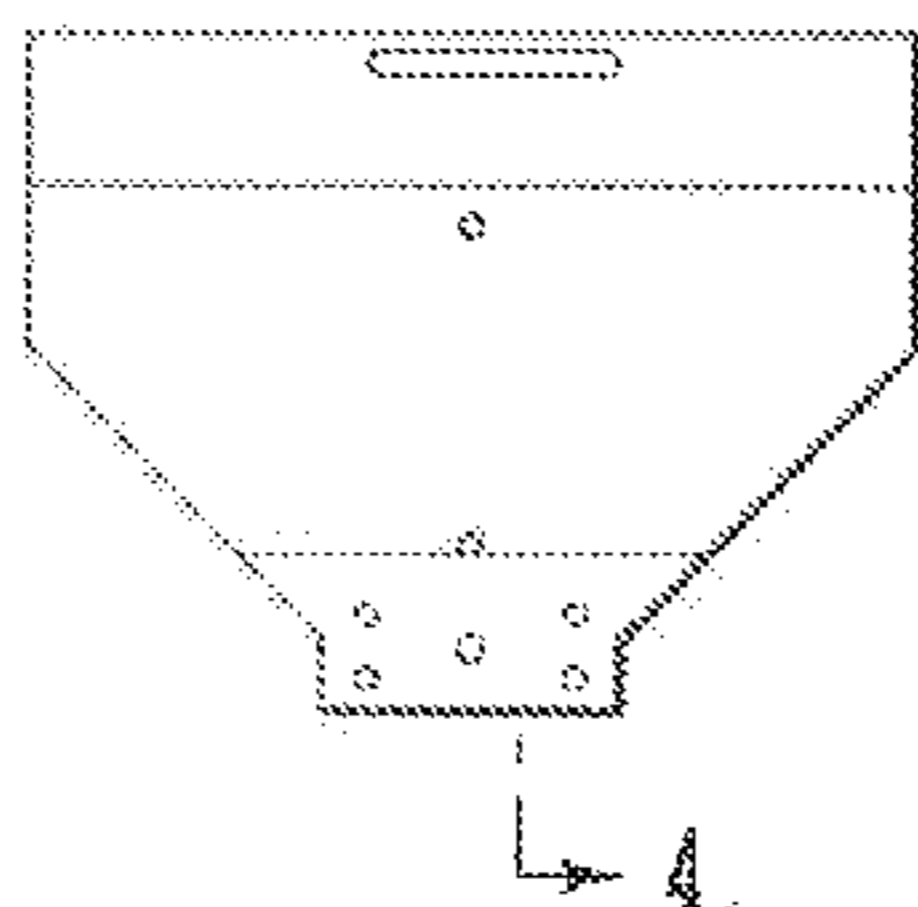
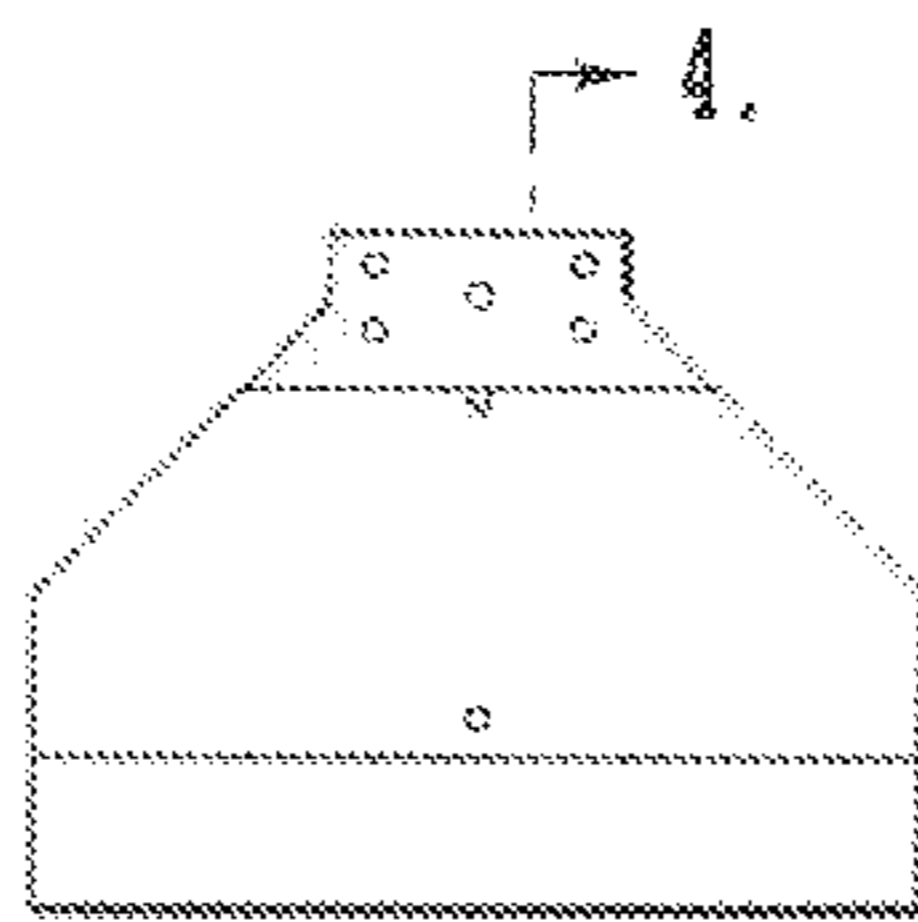
FIG. 4 is a cross-sectional view thereof taken along line 4—4 in FIG. 1;

FIG. 5 is a cross-sectional view thereof taken along line 5—5 in FIG. 4; and,

FIG. 6 is a perspective view thereof in use.

The broken line showing represents unclaimed subject matter.

1 Claim, 4 Drawing Sheets



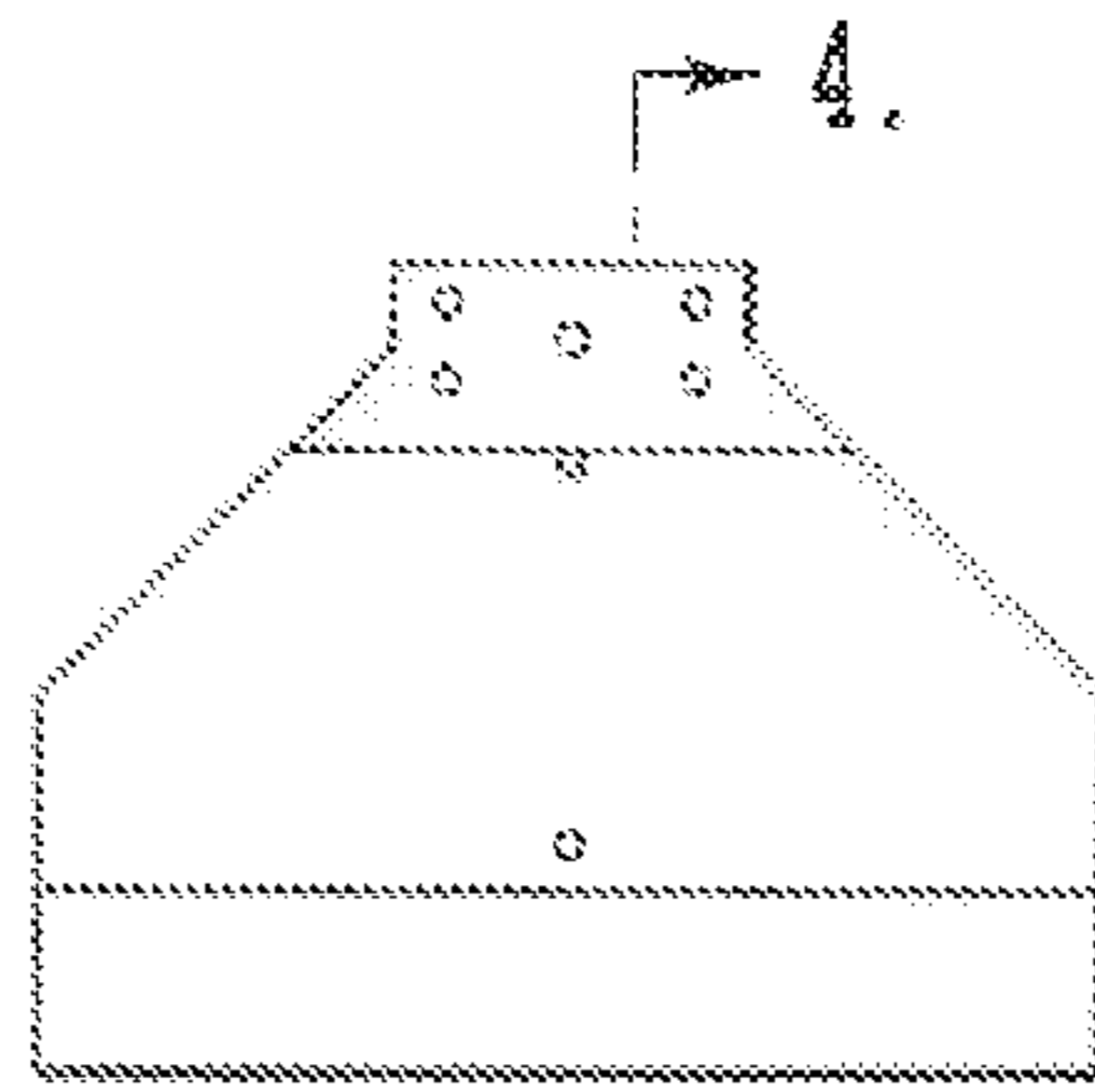


Fig. 1

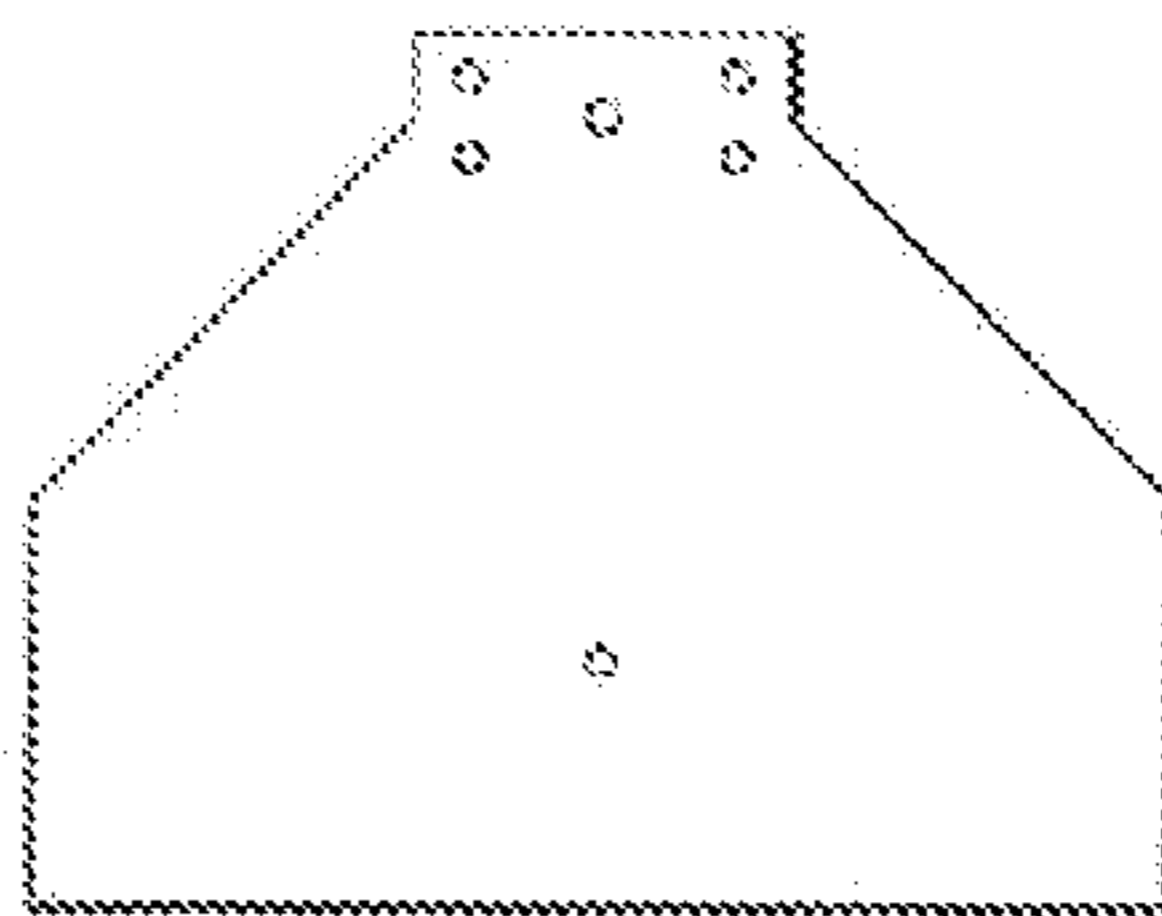
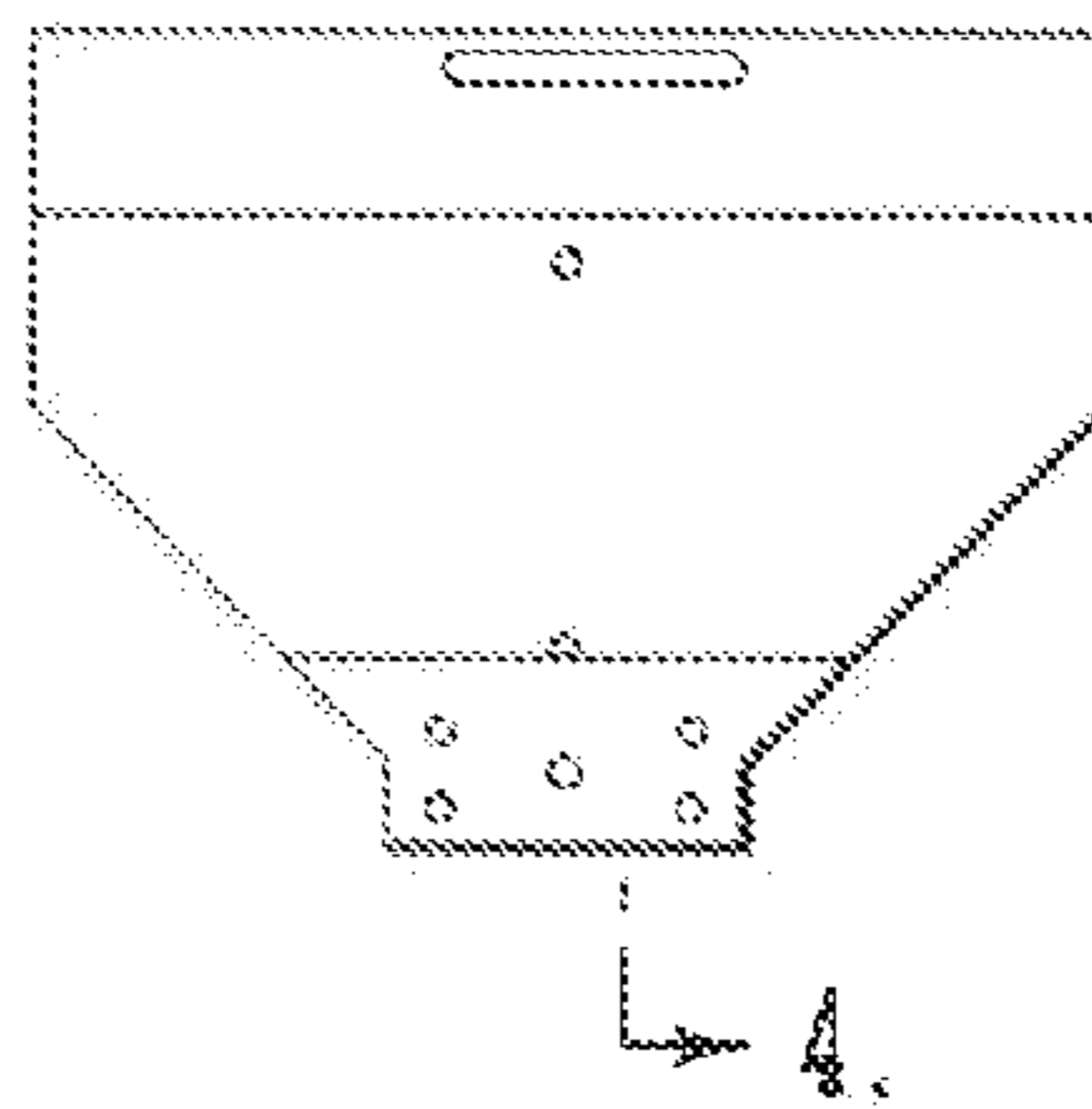
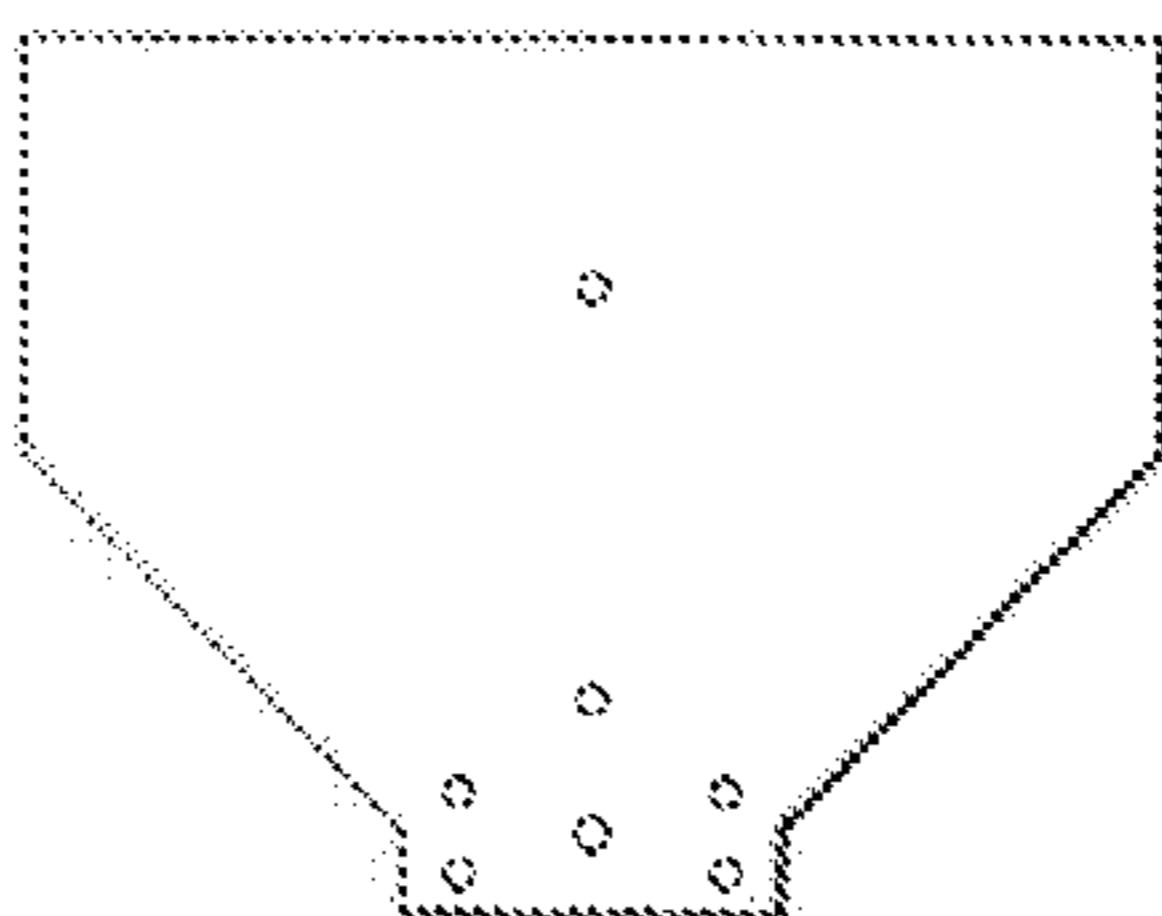


Fig. 2



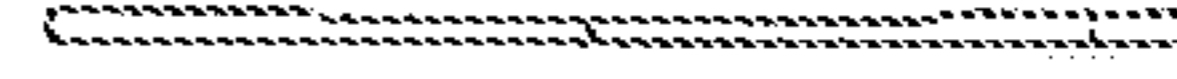
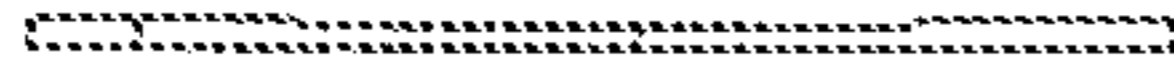


Fig. 3



Fig. 4

5.4

5.

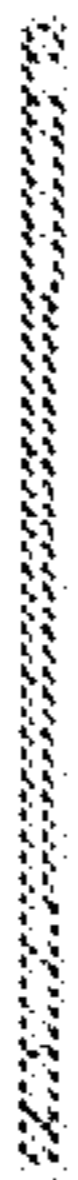




Fig. 5

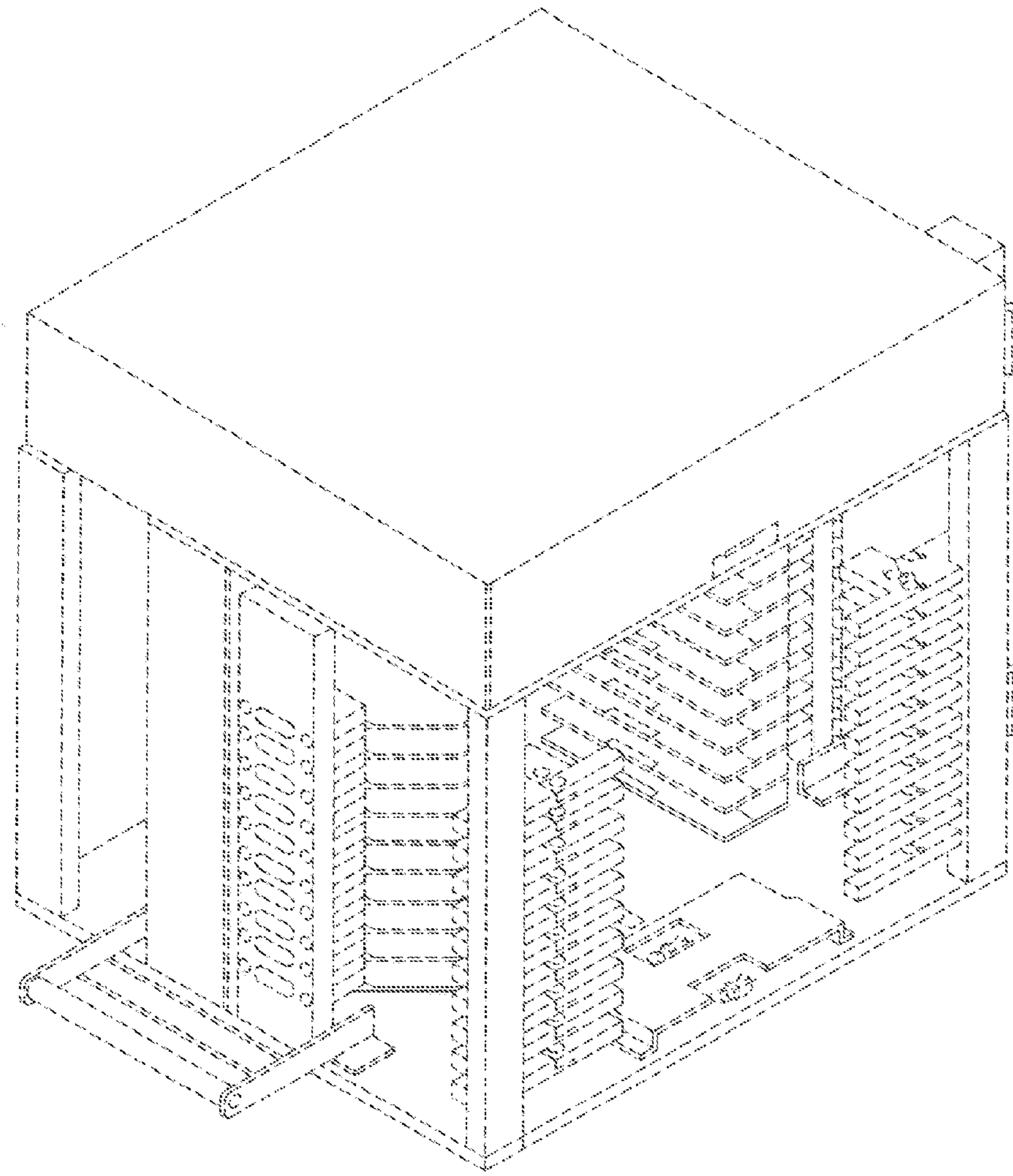


Fig. 6