



US00D679646S

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

(10) **Patent No.:** **US D679,646 S**

(45) **Date of Patent:** **\*\* Apr. 9, 2013**

(54) **DESCENT STAGE FOR MARS ROVER**

(75) Inventors: **Tommaso P. Rivellini**, Porter Ranch, CA (US); **Jaime M. Waydo**, Pasadena, CA (US); **Christopher J. Voorhees**, Altadena, CA (US); **Louise Jandura**, Altadena, CA (US); **Benjamin L. Thoma**, Los Angeles, CA (US); **Robert M. Manning**, Pasadena, CA (US); **Howard J. Eisen**, Burbank, CA (US); **Adam D. Steltzner**, Altadena, CA (US); **Steven W. Lee**, Stevenson Ranch, CA (US); **Alejandro M. San Martin**, San Gabriel, CA (US); **Dara Sabahi**, Los Angeles, CA (US); **Jeffrey W. Umland**, Pasadena, CA (US)

(73) Assignee: **California Institute of Technology**, Pasadena, CA (US)

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

(21) Appl. No.: **29/342,598**

(22) Filed: **Aug. 27, 2009**

(51) **LOC (9) Cl.** ..... **12-07**

(52) **U.S. Cl.** ..... **D12/320**

(58) **Field of Classification Search** ..... D12/320;  
D21/436, 447, 451; 446/34, 46; 244/158.1  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

3,175,739	A *	3/1965	Speicher	.....	222/342
D202,456	S *	9/1965	Webb et al.	.....	D19/63
4,296,892	A *	10/1981	Barge	.....	244/2
4,667,907	A *	5/1987	Hujesak et al.	.....	244/158.1

D332,249	S *	1/1993	Harper	.....	D12/320
D394,040	S	5/1998	O'Neal et al.		
D408,780	S *	4/1999	Gaiter	.....	D12/320
D413,551	S	9/1999	Wilcox et al.		
D430,530	S *	9/2000	Milde, Jr.	.....	D12/325
D437,255	S	2/2001	Bickler et al.		
D487,715	S	3/2004	Lindermann et al.		
D488,093	S	4/2004	Lindermann et al.		
D493,411	S *	7/2004	Fong	.....	D12/319
D505,105	S *	5/2005	Rivellini et al.	.....	D12/320

\* cited by examiner

*Primary Examiner* — Robin V Webster

(74) *Attorney, Agent, or Firm* — Christie, Parker & Hale, LLP

(57) **CLAIM**

The ornamental design for descent stage for Mars rover, as shown and described.

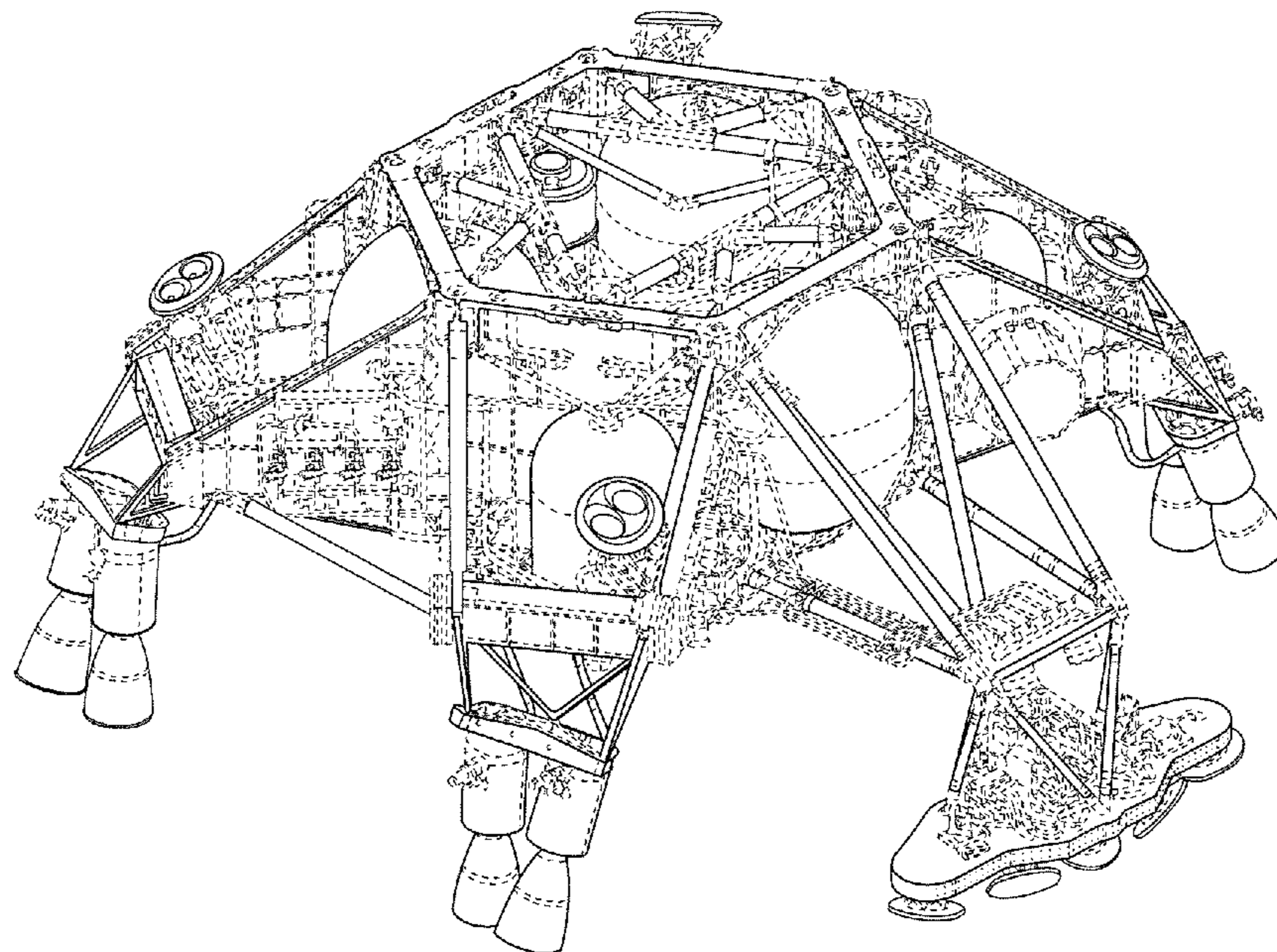
**DESCRIPTION**

The invention described herein was made in the performance of work under a NASA contract, and is subject to the provisions of Public Law 96-517 (35 USC 202) in which the Contractor has elected to retain title.

FIG. 1 is a front perspective view of a descent stage for a Mars rover according to our new design;  
FIG. 2 is a rear perspective view thereof;  
FIG. 3 is a top plan view thereof;  
FIG. 4 is a bottom plan view thereof;  
FIG. 5 is a first side elevational view thereof;  
FIG. 6 is a second side elevational view thereof;  
FIG. 7 is a front elevational view thereof; and,  
FIG. 8 is a rear elevational view thereof.

The broken line showing is included for the purpose of illustrating and forms no part of the claimed design.

**1 Claim, 8 Drawing Sheets**



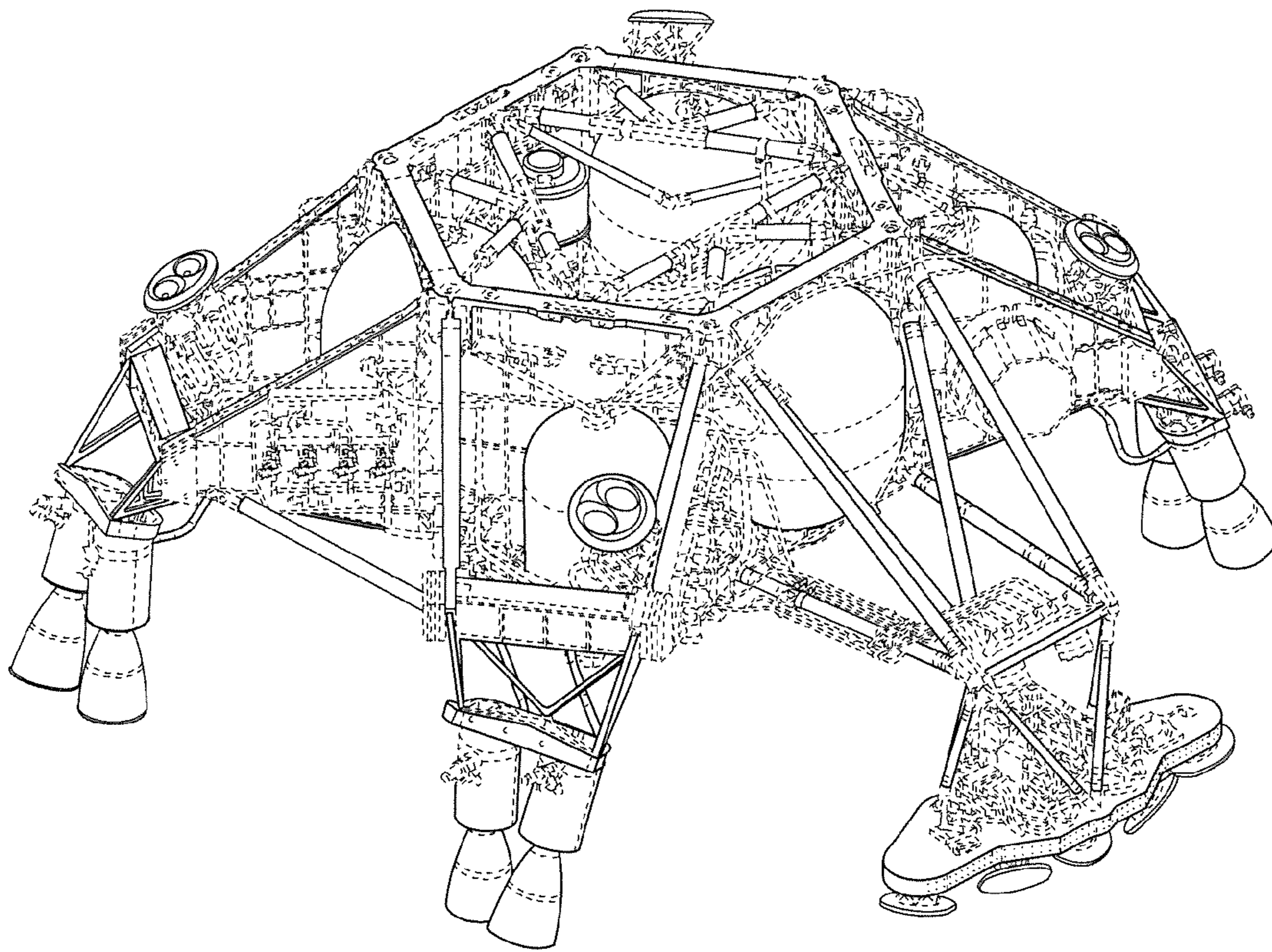


FIG. 1



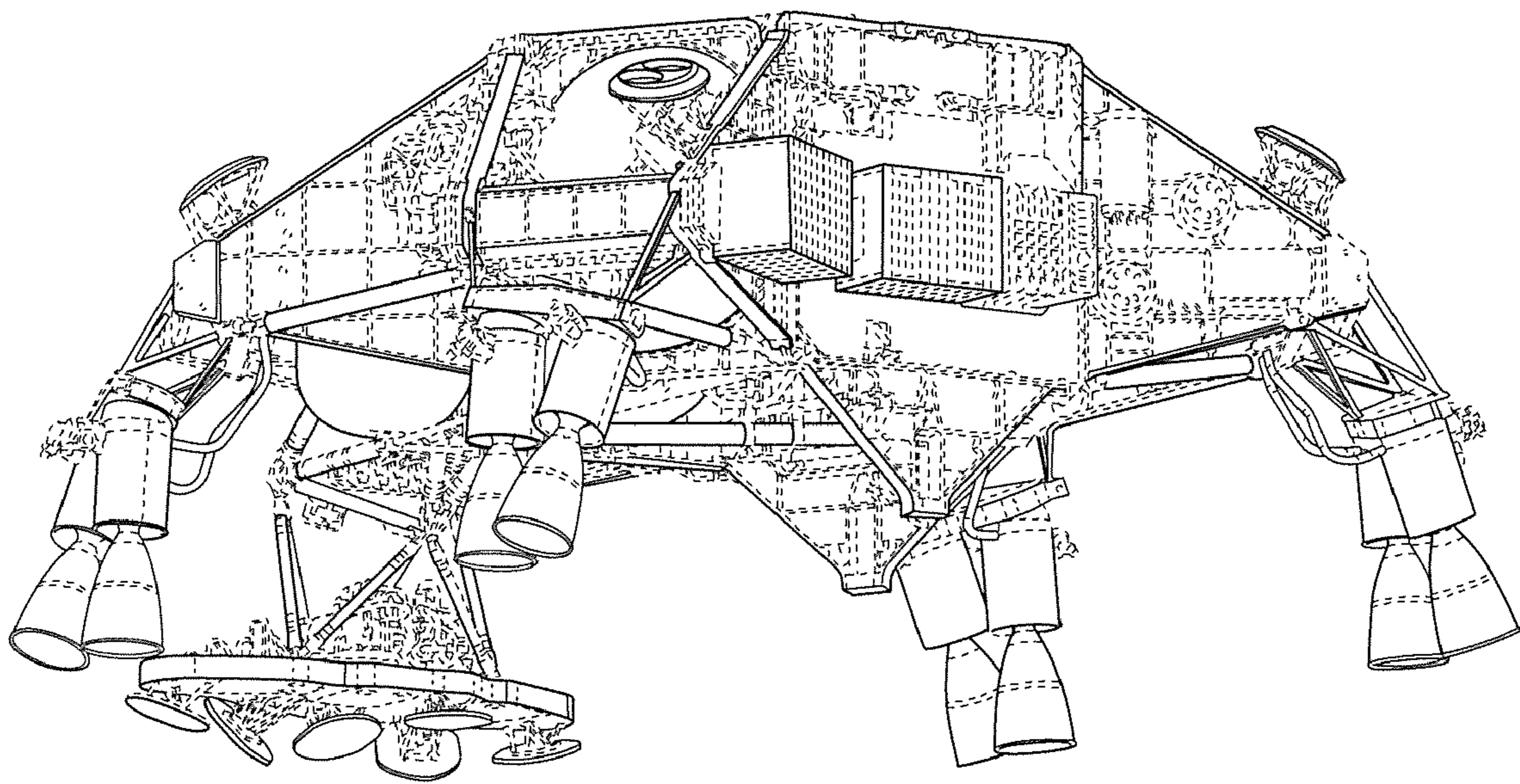


FIG. 2

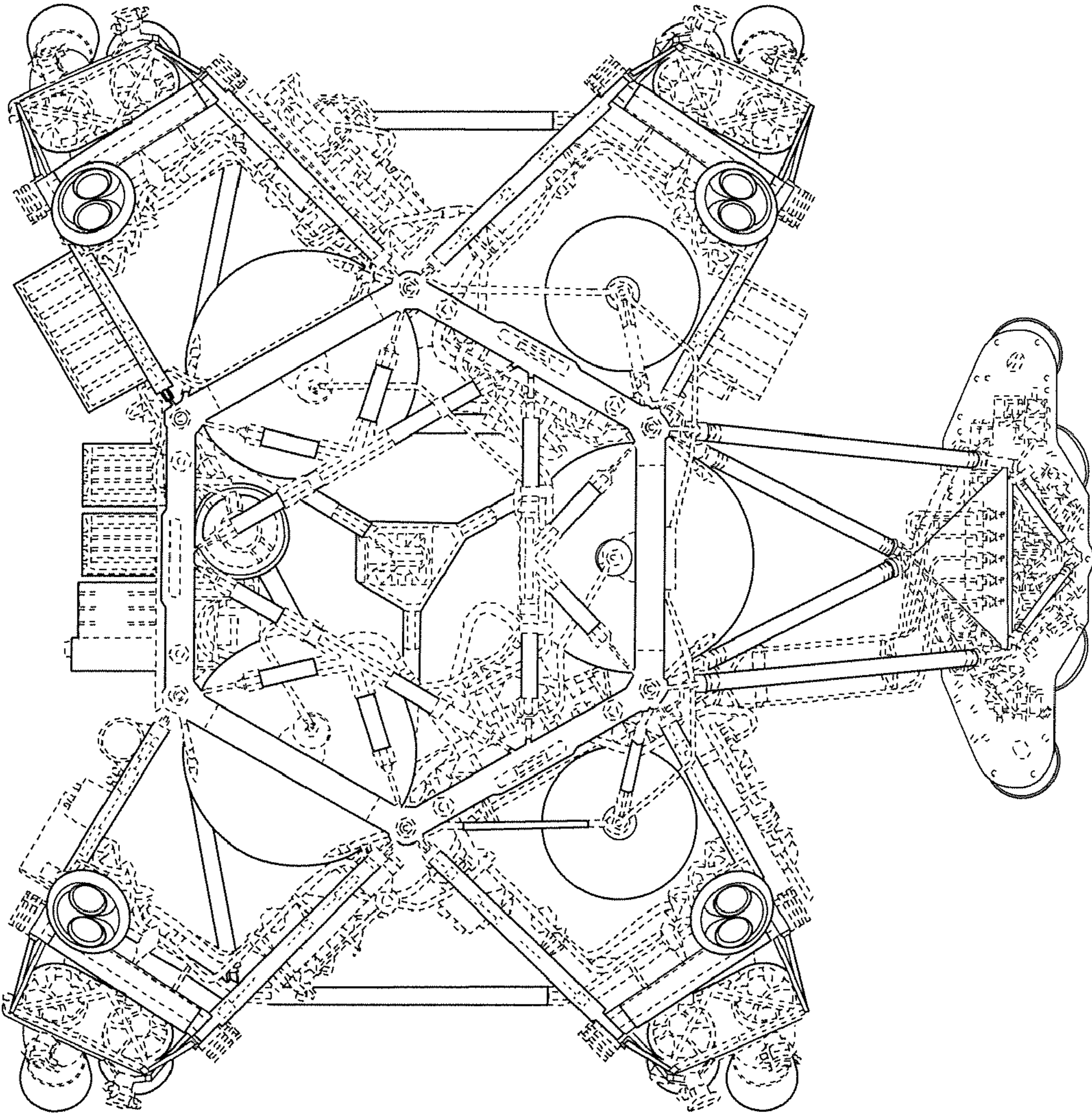


FIG. 3



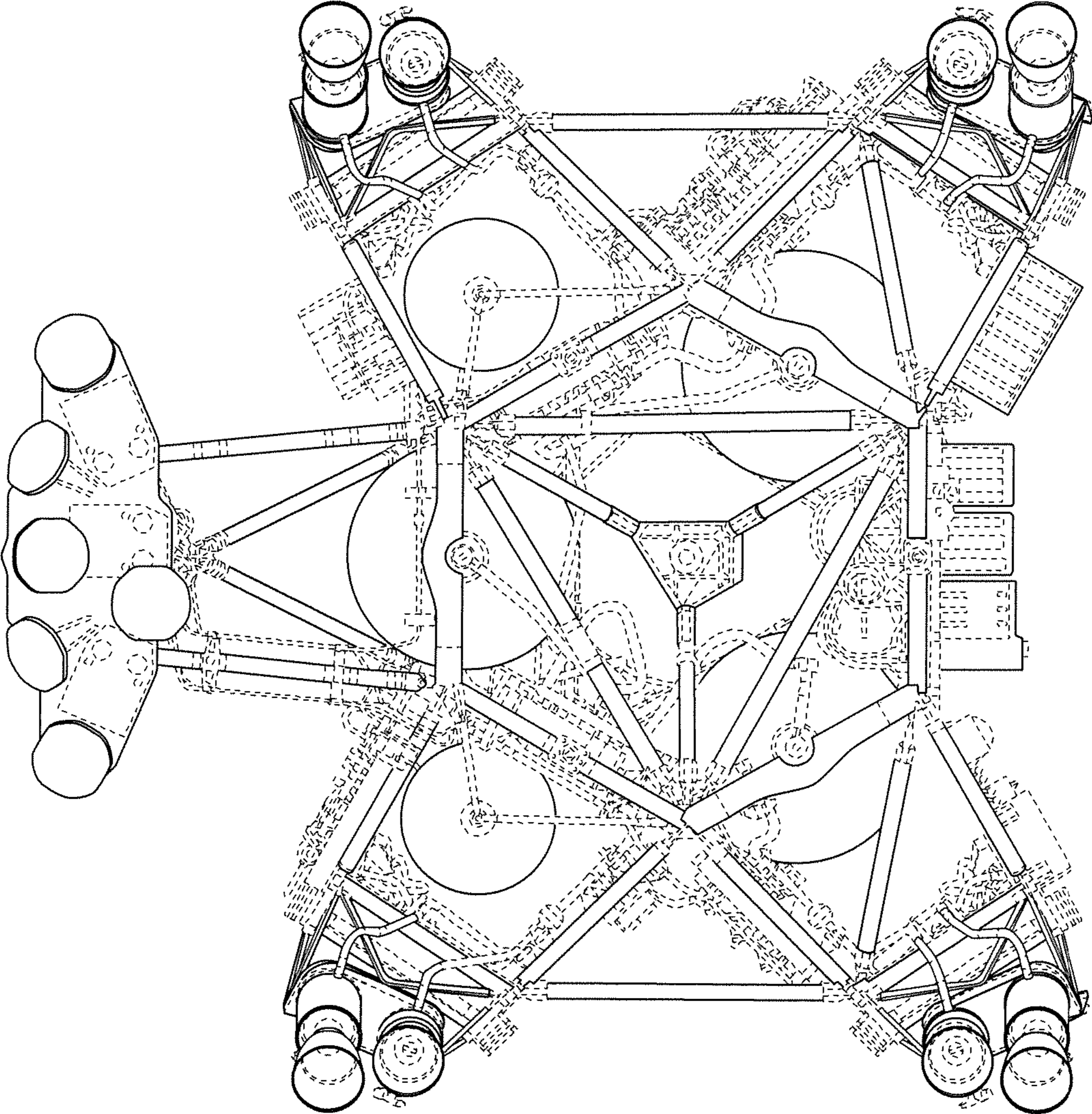


FIG. 4

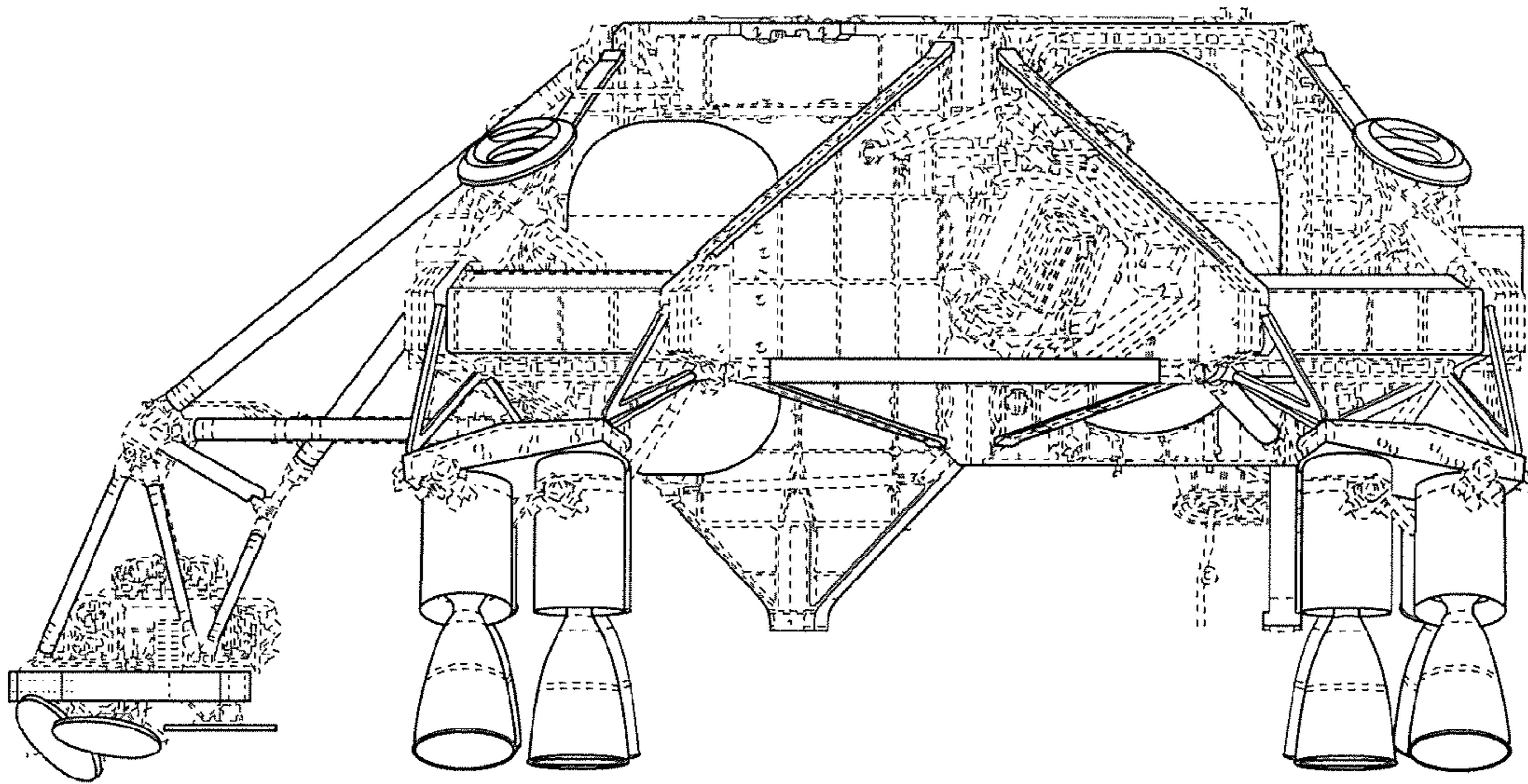


FIG. 5



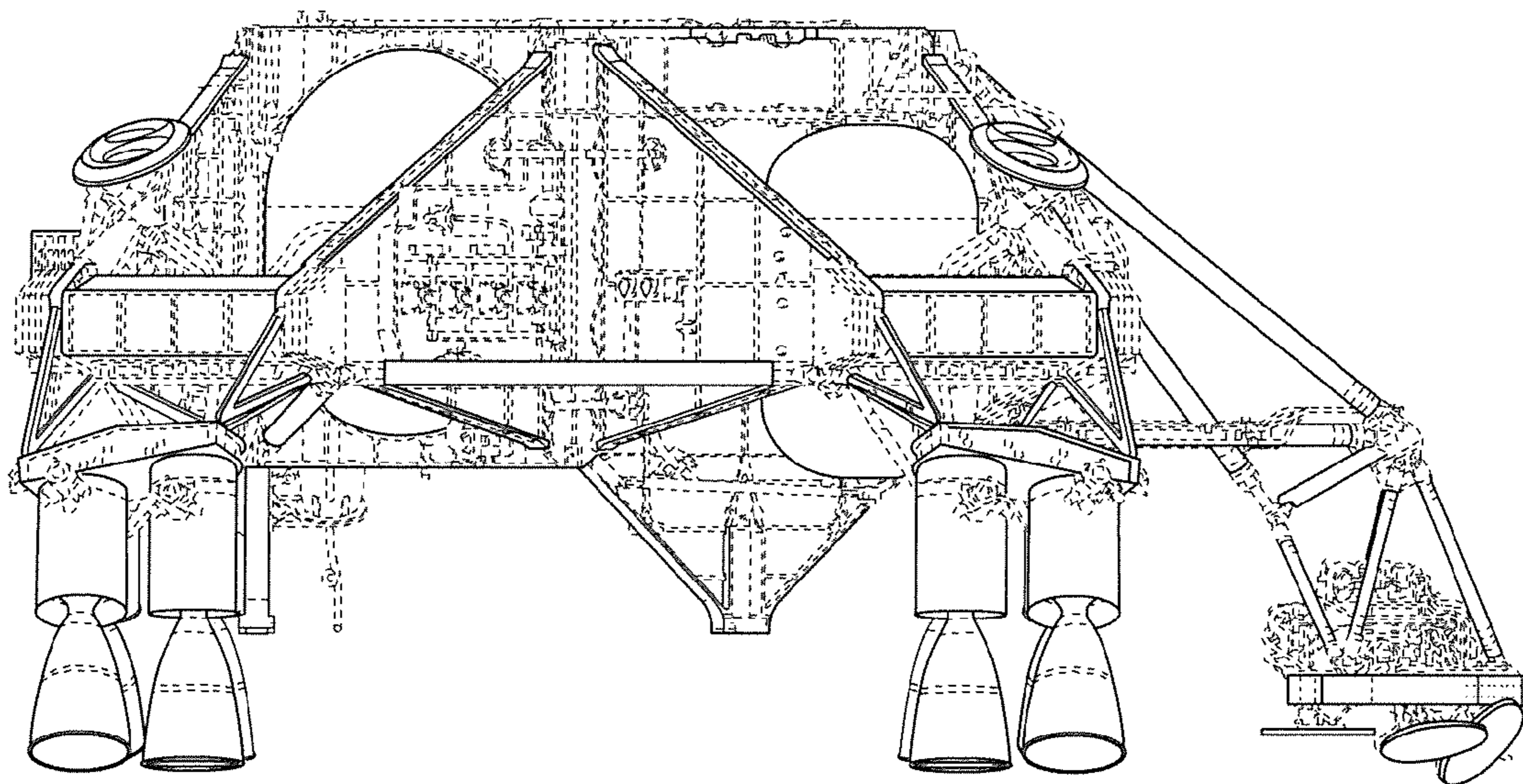


FIG. 6

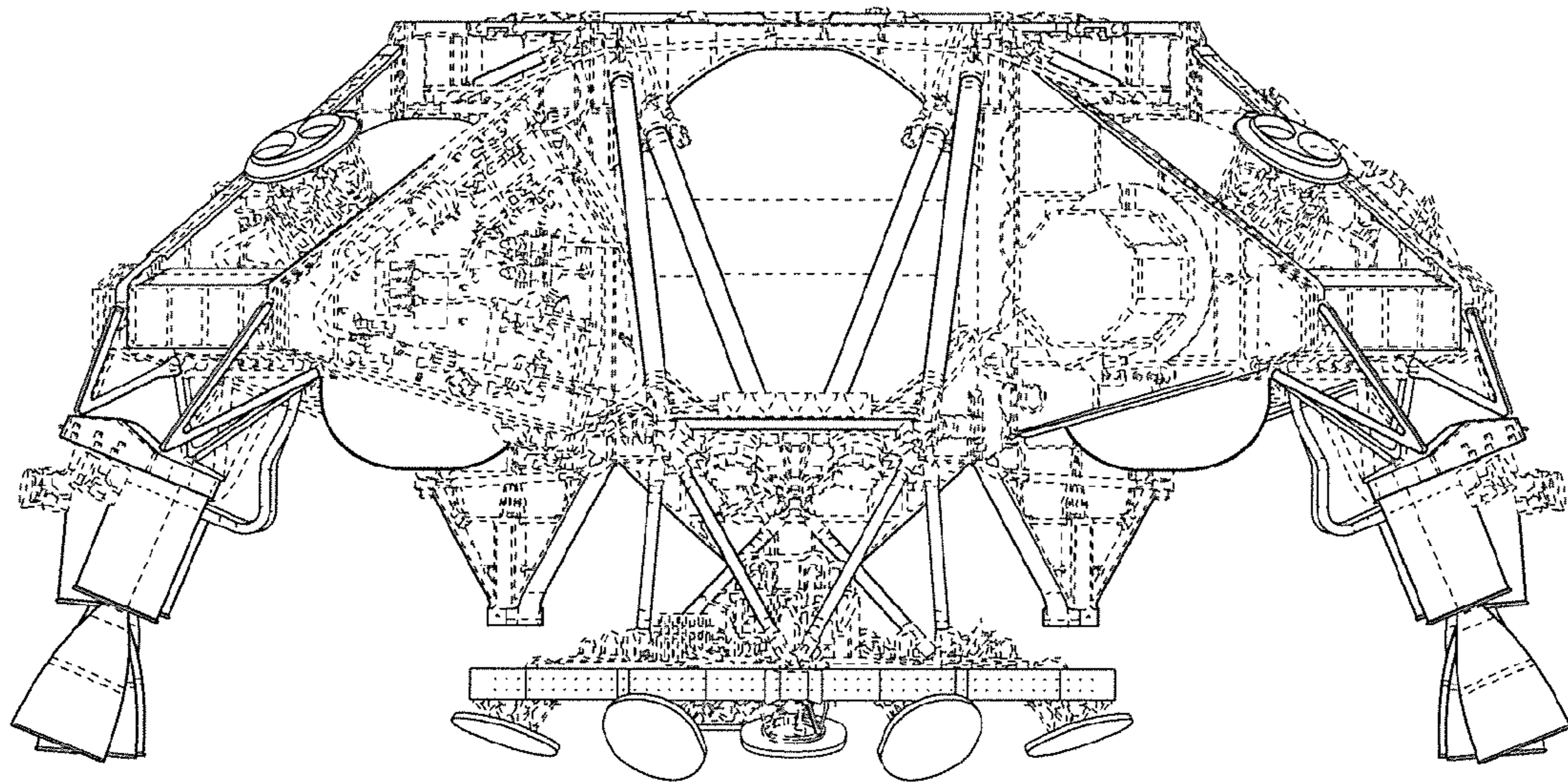


FIG. 7



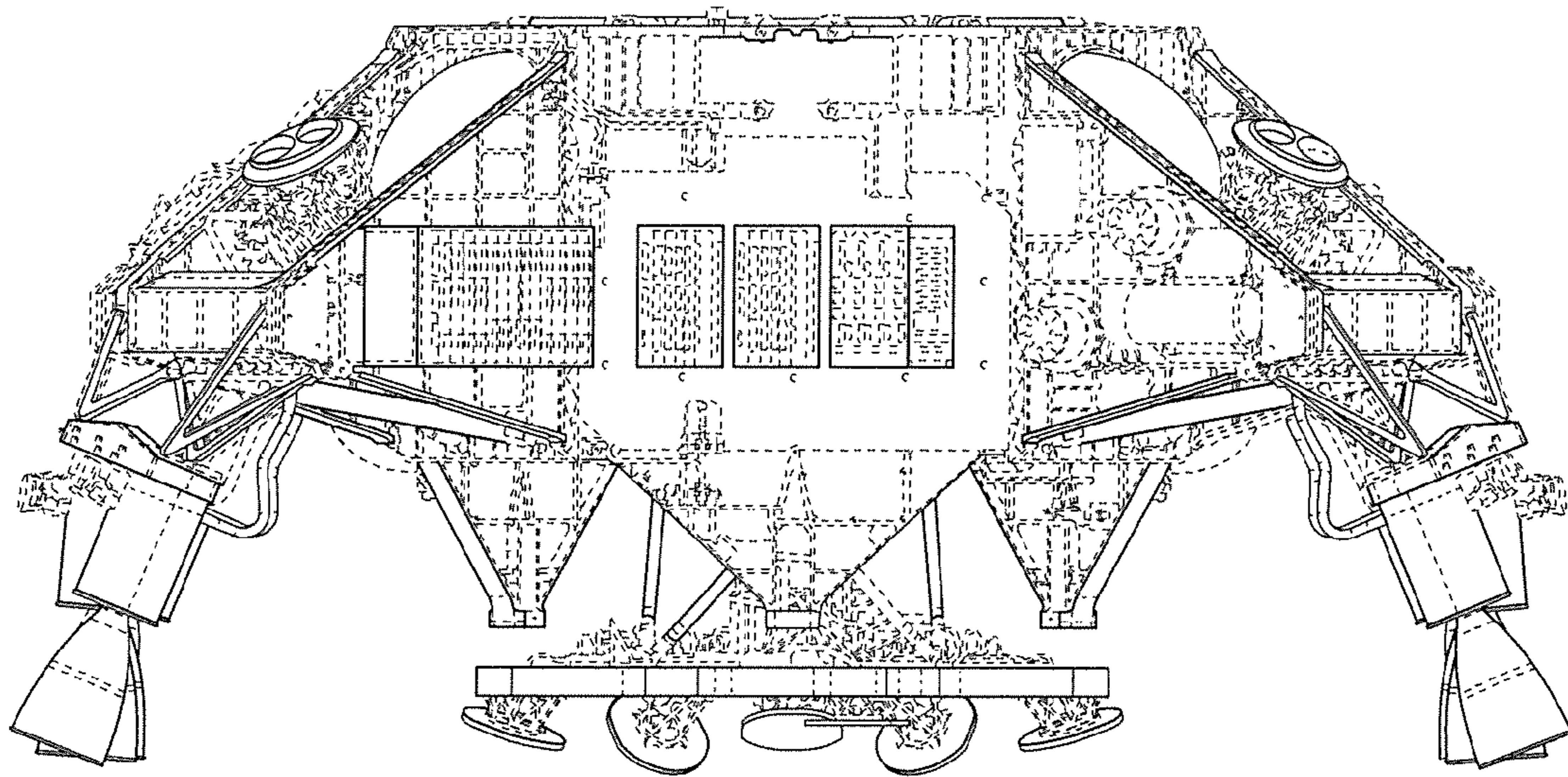


FIG. 8