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(12) **United States Design Patent** (10) **Patent No.:** **US D924,957 S**
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(54) **WEARABLE WALKING-ASSISTANCE ROBOT**

2201/165; A61H 2201/1207; A61H 2201/0165; A43B 3/0005

See application file for complete search history.

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(56) **References Cited**

U.S. PATENT DOCUMENTS

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9,568,074	B2 *	2/2017	Gosselin	F16H 19/08
9,789,023	B1 *	10/2017	Lee	A63B 24/0021
D810,801	S *	2/2018	Hsu	D15/199
D847,891	S *	5/2019	Kawaguchi	.....	D15/199
D888,120	S *	6/2020	Hurst	.....	D15/199
D891,492	S *	7/2020	Kawaguchi	.....	D15/199
D892,186	S *	8/2020	Kawaguchi	.....	D15/199
2012/0271207	A1 *	10/2012	Schoen	.....	A61F 5/0102 601/34
2015/0196449	A1 *	7/2015	Ahn	.....	A61H 1/024 623/27
2015/0197008	A1 *	7/2015	Yoon	.....	B25J 9/0006 700/250
2015/0272811	A1 *	10/2015	Choi	.....	B25J 9/0006 623/27
2017/0319421	A1 *	11/2017	Julin	.....	B25J 9/104
2018/0133894	A1 *	5/2018	Choi	.....	B25J 9/0006
2018/0193172	A1 *	7/2018	Smith	B25J 9/148
2019/0001493	A1 *	1/2019	Hyun	B25J 9/0006

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(**) Term: **15 Years**

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(52) **U.S. Cl.**
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CPC **A61H 3/00 (2013.01)**

(58) **Field of Classification Search**
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CPC A61H 3/00; A61H 1/024; A61H 1/0244; A61H 2201/5097; A61H 2201/5061; A61H 2201/5071; A61H 2201/1623; A61H 2201/50; A61H 2201/5069; A61H

(Continued)

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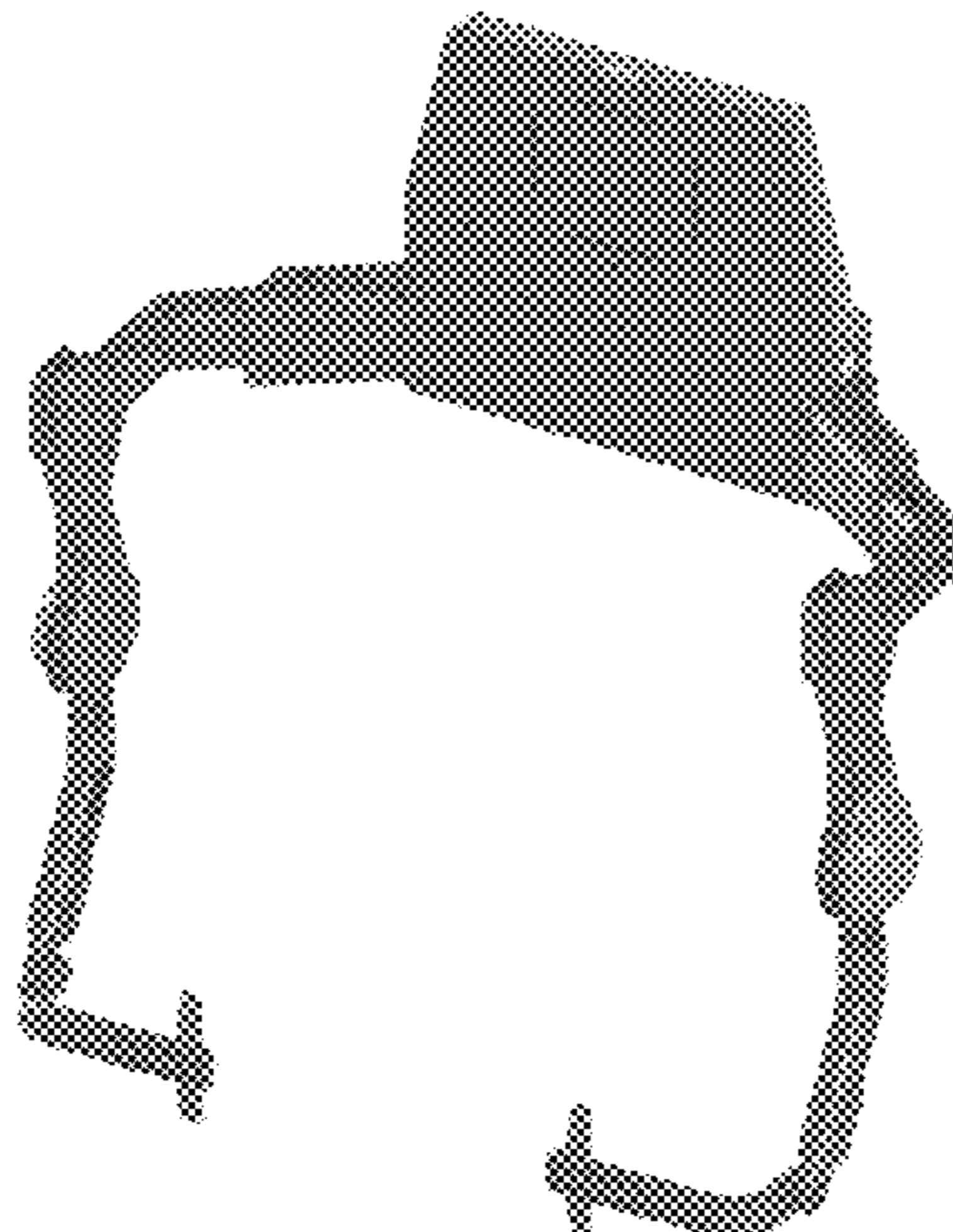
(57) **CLAIM**

The ornamental design for a wearable walking-assistance robot, as shown and described.

DESCRIPTION

1. Wearable walking-assistance robot
- 1.1 : Perspective
- 1.2 : Front
- 1.3 : Back
- 1.4 : Left
- 1.5 : Right
- 1.6 : Top
- 1.7 : Bottom

1 Claim, 7 Drawing Sheets



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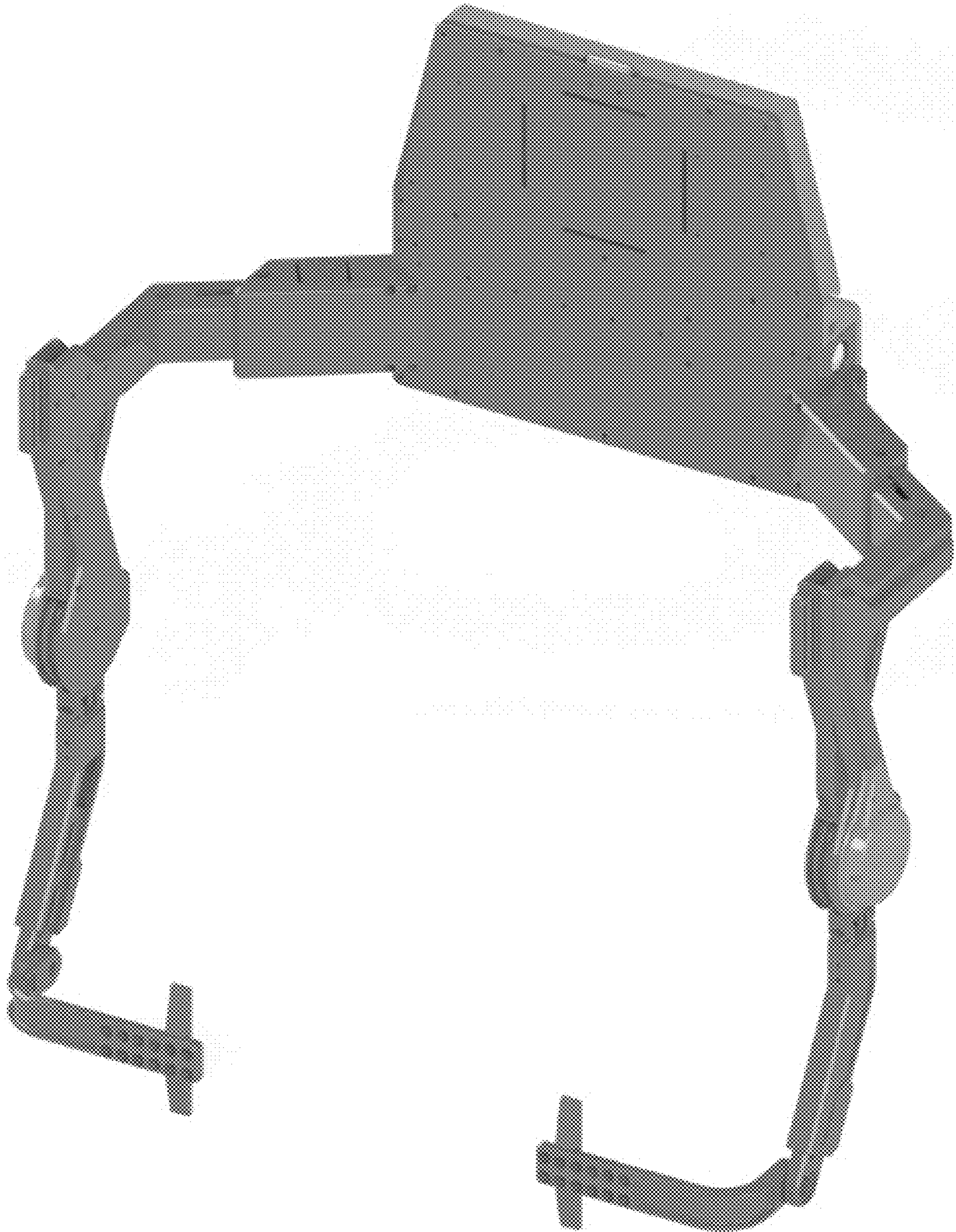
References Cited

U.S. PATENT DOCUMENTS

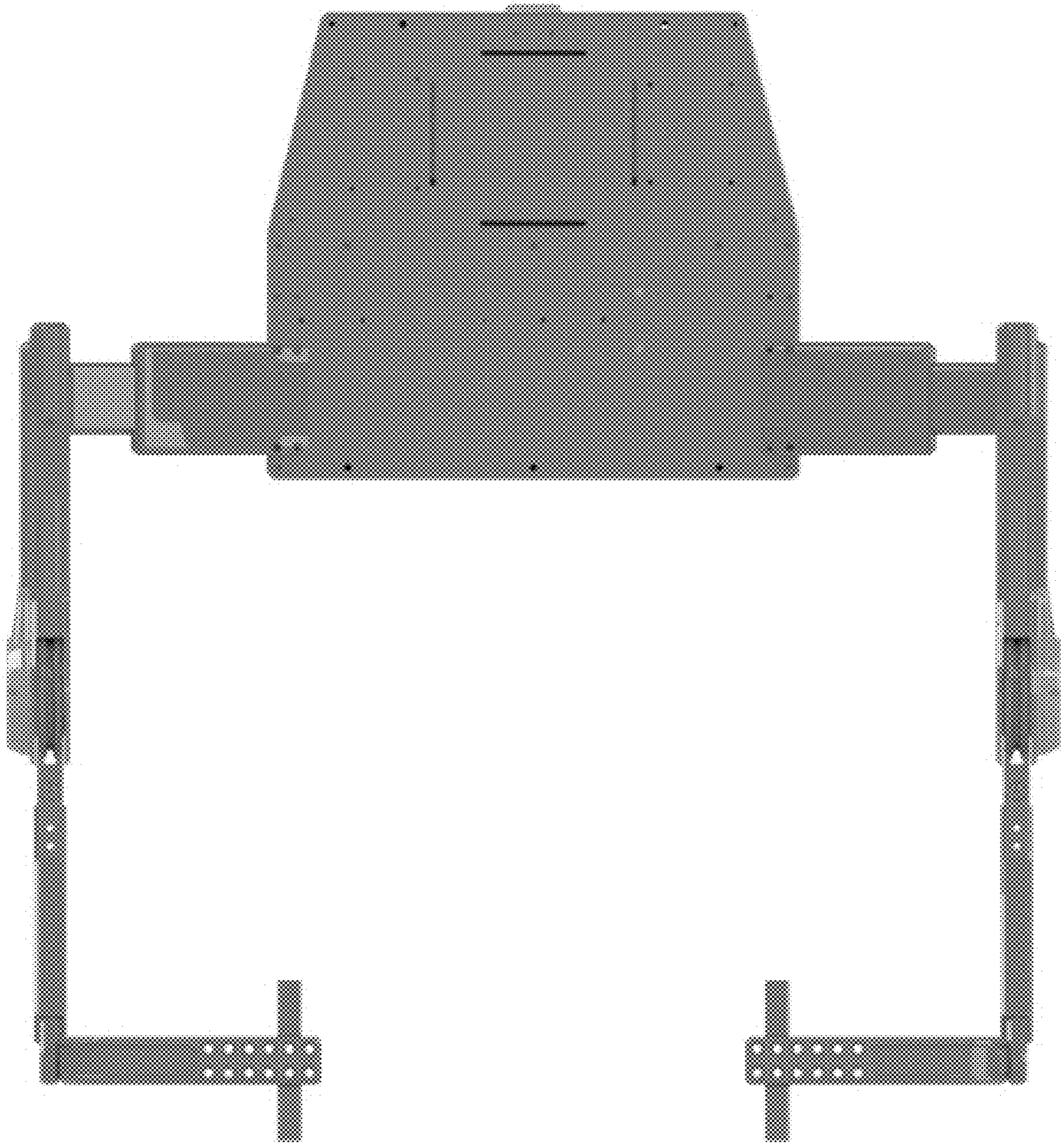
2019/0009405 A1* 1/2019 Ko A61H 1/0218
2020/0315900 A1* 10/2020 Hyun A61H 1/024

* cited by examiner

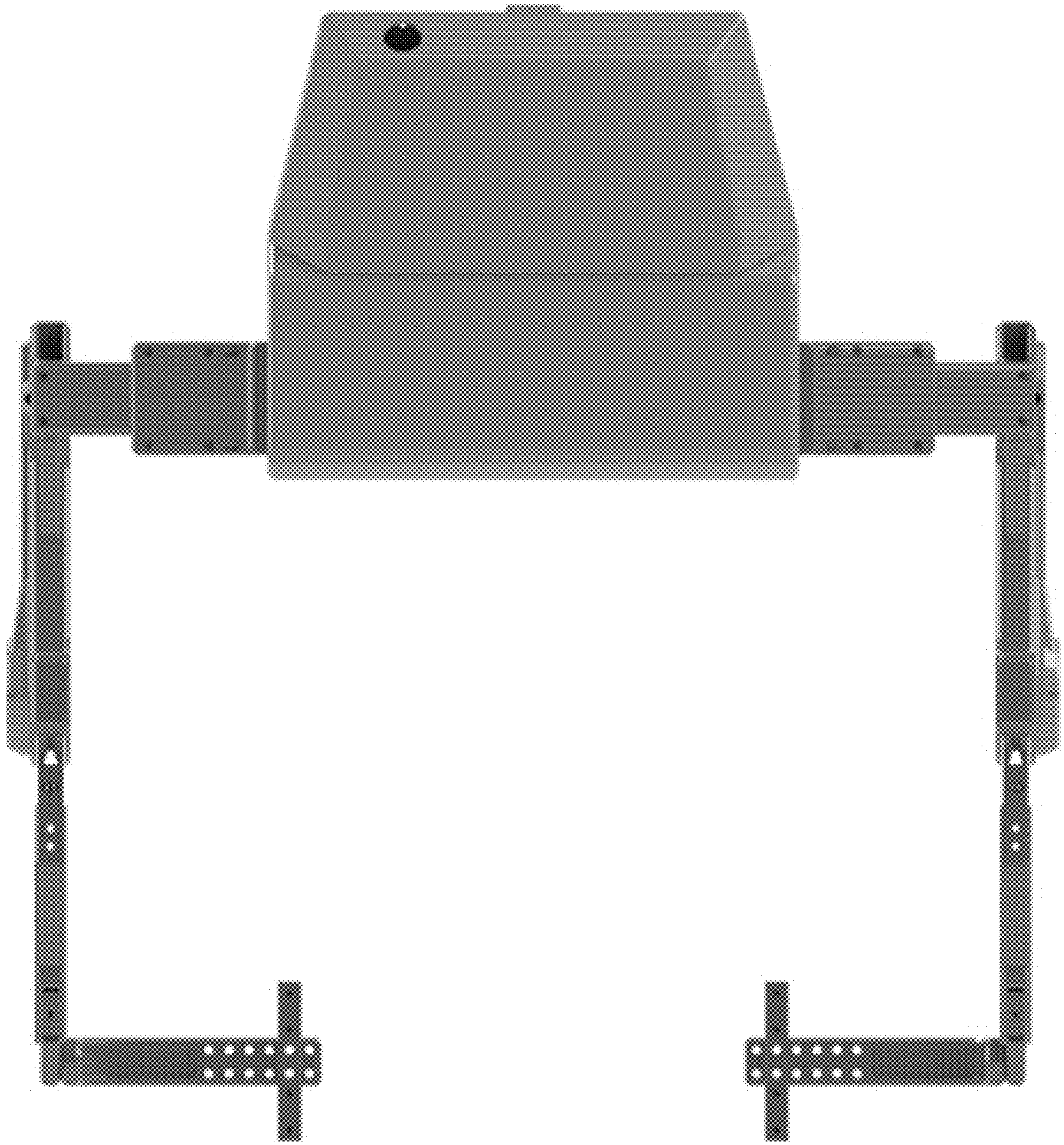
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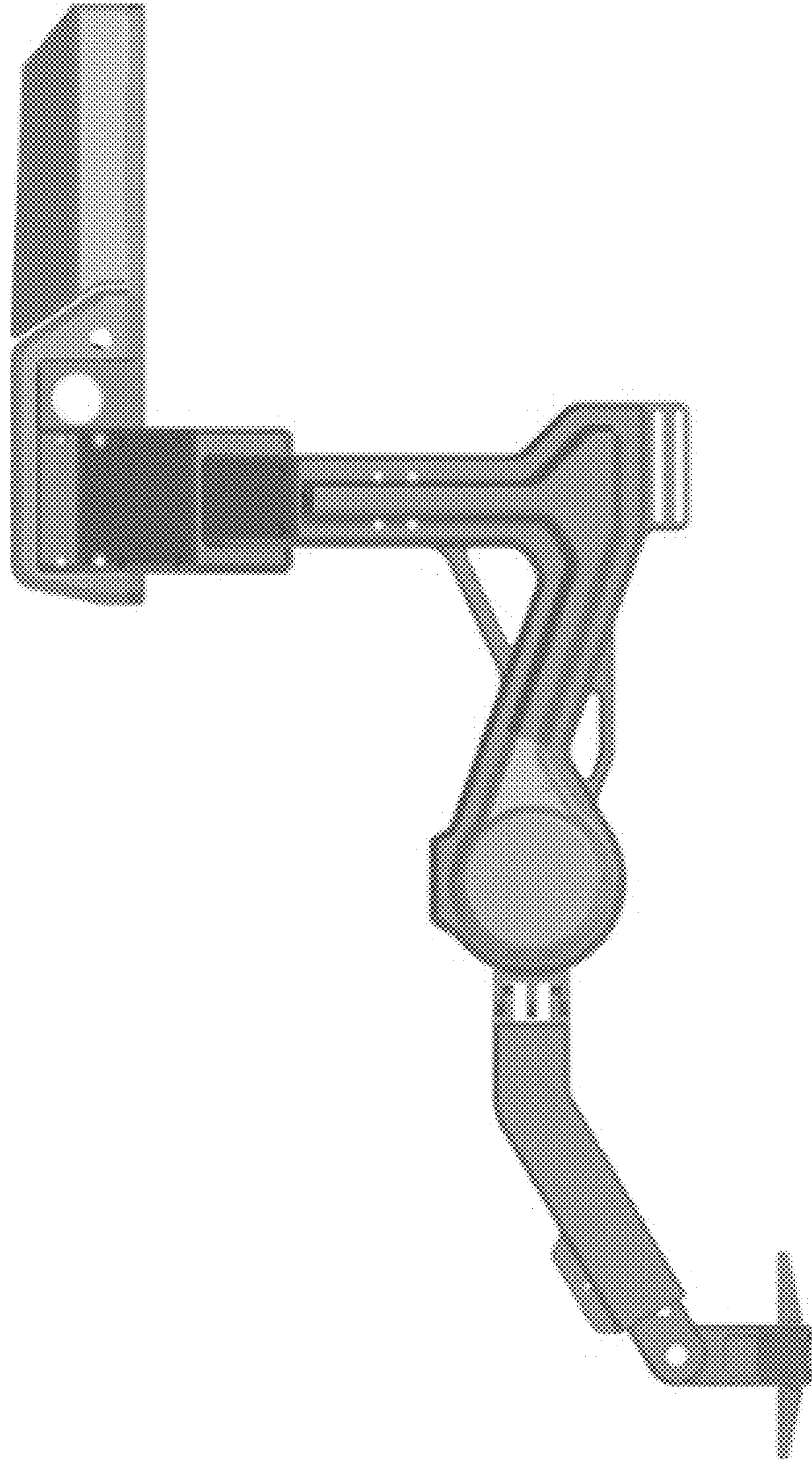
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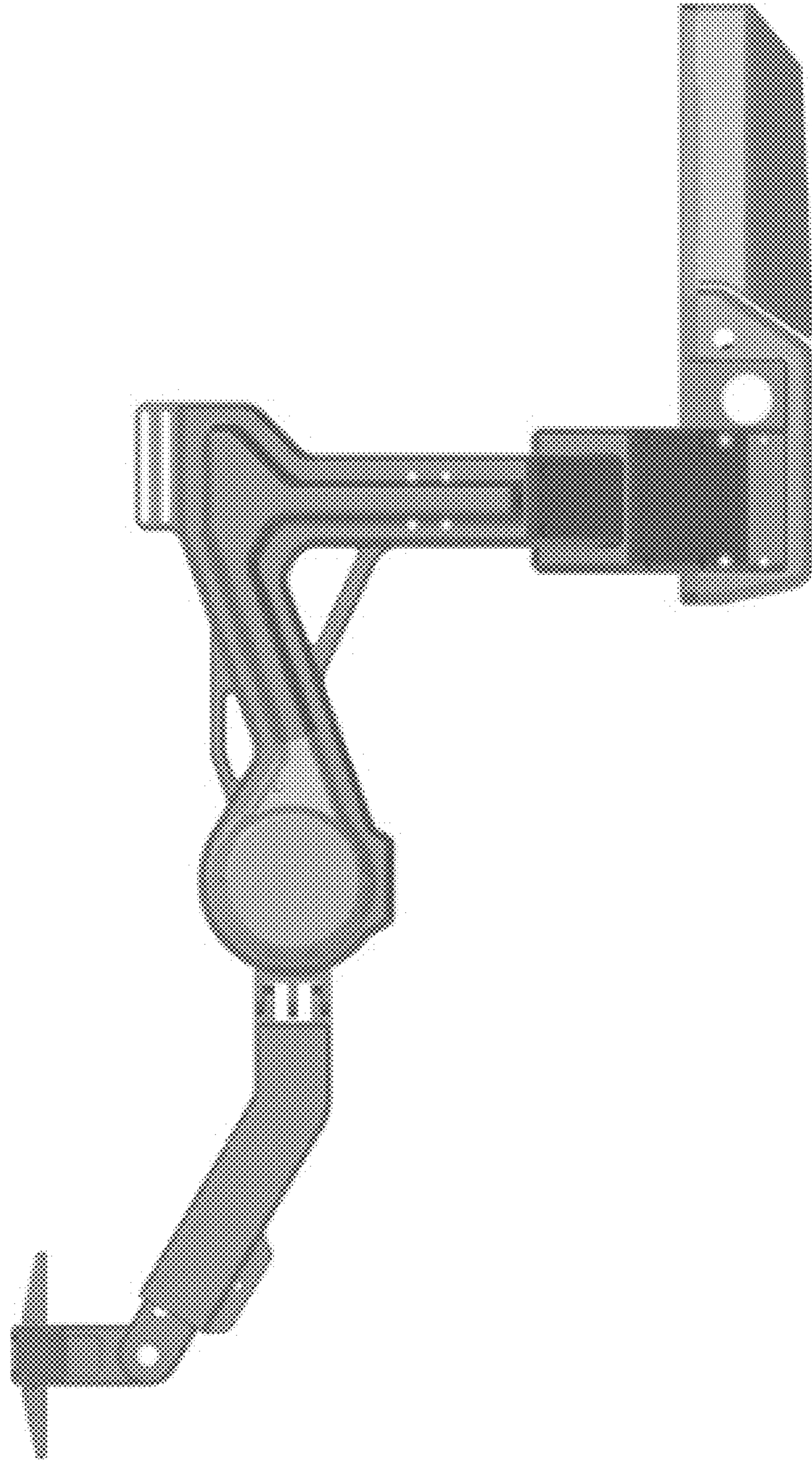
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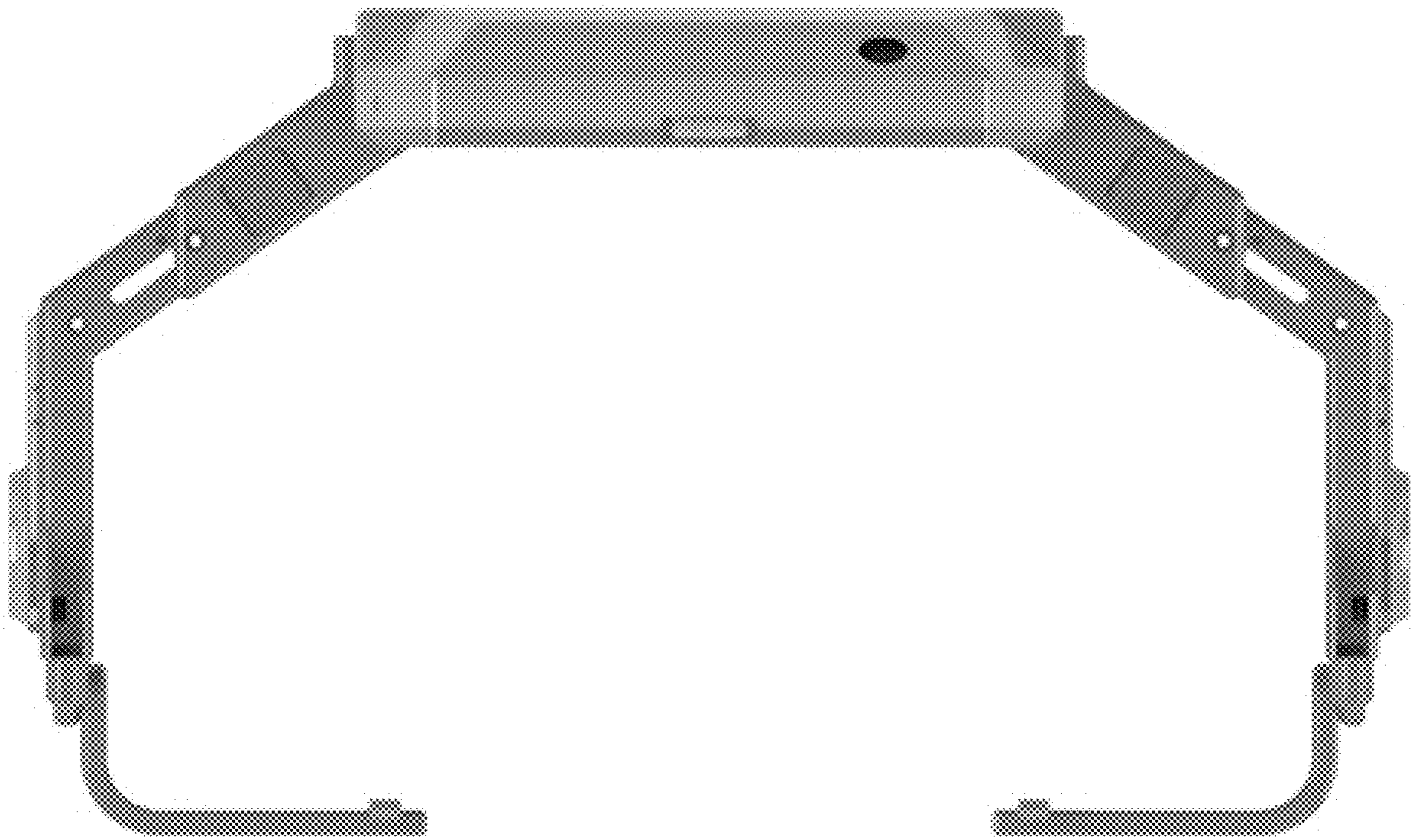
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