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

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(54) **VACUUM PUMP**

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(\*) Notice: This patent is subject to a terminal disclaimer.

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(52) **U.S. Cl.**

USPC ..... **D15/7**

CPC ..... **F02M 37/04** (2013.01)

(58) **Field of Classification Search**

USPC ..... D15/7-9; D23/231, 232, 225; 417/60, 417/235, 265, 321, 355, 358, 363, 359, 417/410.1, 415-416, 405, 900, 269, 539; 60/408, 412; 184/26-37; 415/140-147; 123/495, 509; 137/565.34

CPC ..... F02M 37/04; F02M 37/14; F04B 53/92; F04B 1/005

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D263,302 S \* 3/1982 Terajima ..... D15/7

D328,304 S \* 7/1992 Frohn ..... D15/1

D339,144 S \* 9/1993 Cline, Sr. .... D15/7

D406,268 S *	3/1999	Lamond	.....	D15/7
D450,327 S *	11/2001	Mori	.....	D15/7
D485,565 S *	1/2004	Martinello	.....	D15/7
D518,068 S *	3/2006	Rodopoulos	.....	D15/7
D558,232 S *	12/2007	Wang	.....	D15/7
D558,795 S *	1/2008	Saunders	.....	D15/7
D573,609 S *	7/2008	Bilger	.....	D15/7
D591,310 S *	4/2009	Soja	.....	D15/7
D602,960 S *	10/2009	Bukoski	.....	D15/9
D603,426 S *	11/2009	Hauser	.....	D15/7
D609,595 S *	2/2010	Soderstrom	.....	D15/7
D617,814 S *	6/2010	Dreifert	.....	D15/7
D619,624 S *	7/2010	Iwagoshi	.....	D15/7
D621,853 S *	8/2010	Sundheim	.....	D15/7
D656,518 S *	3/2012	Varini	.....	D15/7
D664,155 S *	7/2012	Milner	.....	D15/7
D668,684 S *	10/2012	Noguchi	.....	D15/9
D676,063 S *	2/2013	Soja	.....	D15/7
D676,462 S *	2/2013	Soja	.....	D15/7
D677,281 S *	3/2013	Muller	.....	D15/7
D677,282 S *	3/2013	Soja	.....	D15/7
D677,283 S *	3/2013	Soja	.....	D15/7
D677,701 S *	3/2013	Moysi	.....	D15/7
D723,064 S *	2/2015	Eisele	.....	D15/7

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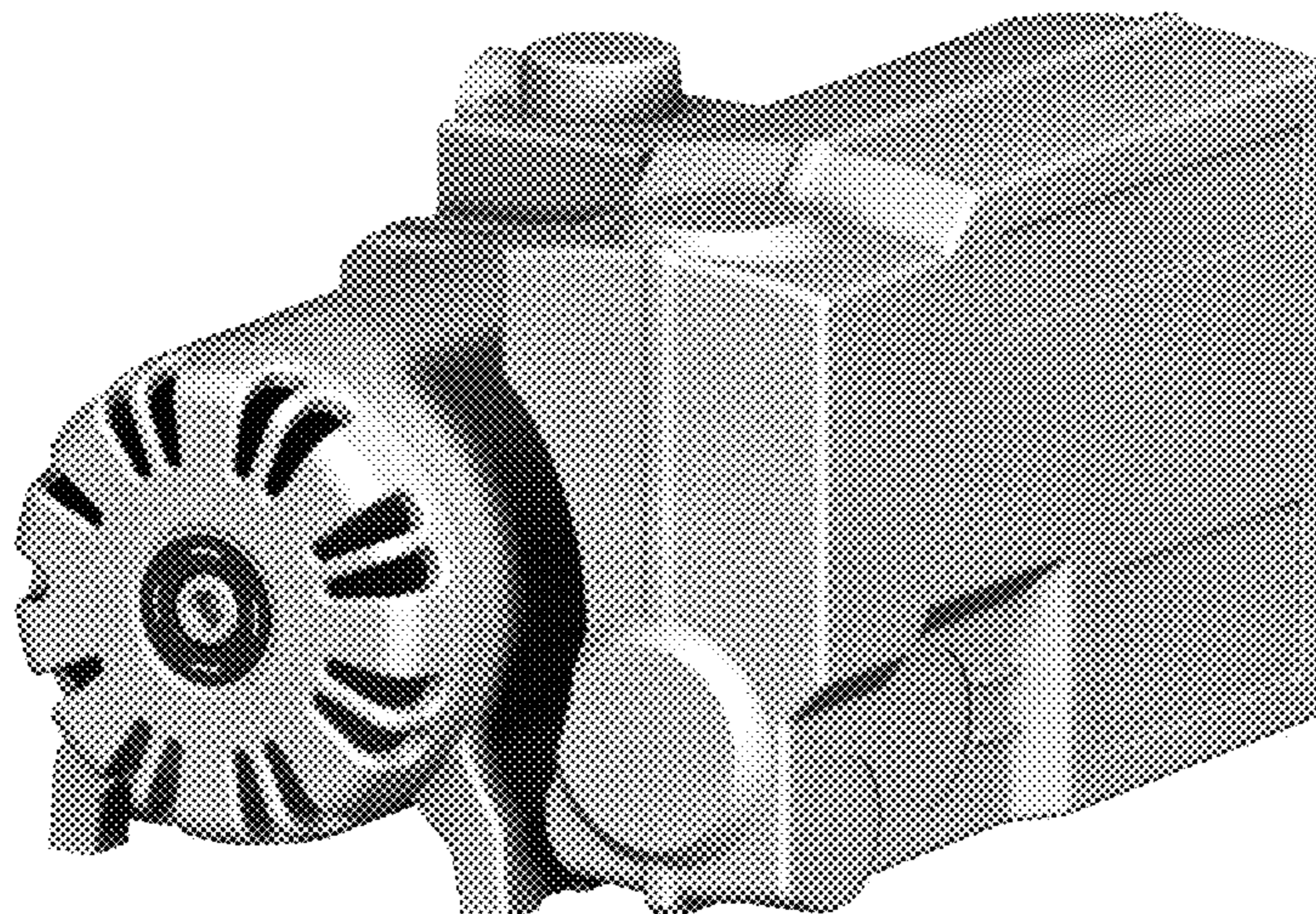
(57) **CLAIM**

The ornamental design for vacuum pump, as shown and described.

**DESCRIPTION**

- 1. Vacuum pump
- 1.1: Perspective
- 1.2: Perspective
- 1.3: Perspective
- 1.4: Perspective
- 1.5: Front
- 1.6: Back
- 1.7: Left
- 1.8: Right
- 1.9: Top
- 1.10: Bottom

**1 Claim, 10 Drawing Sheets**



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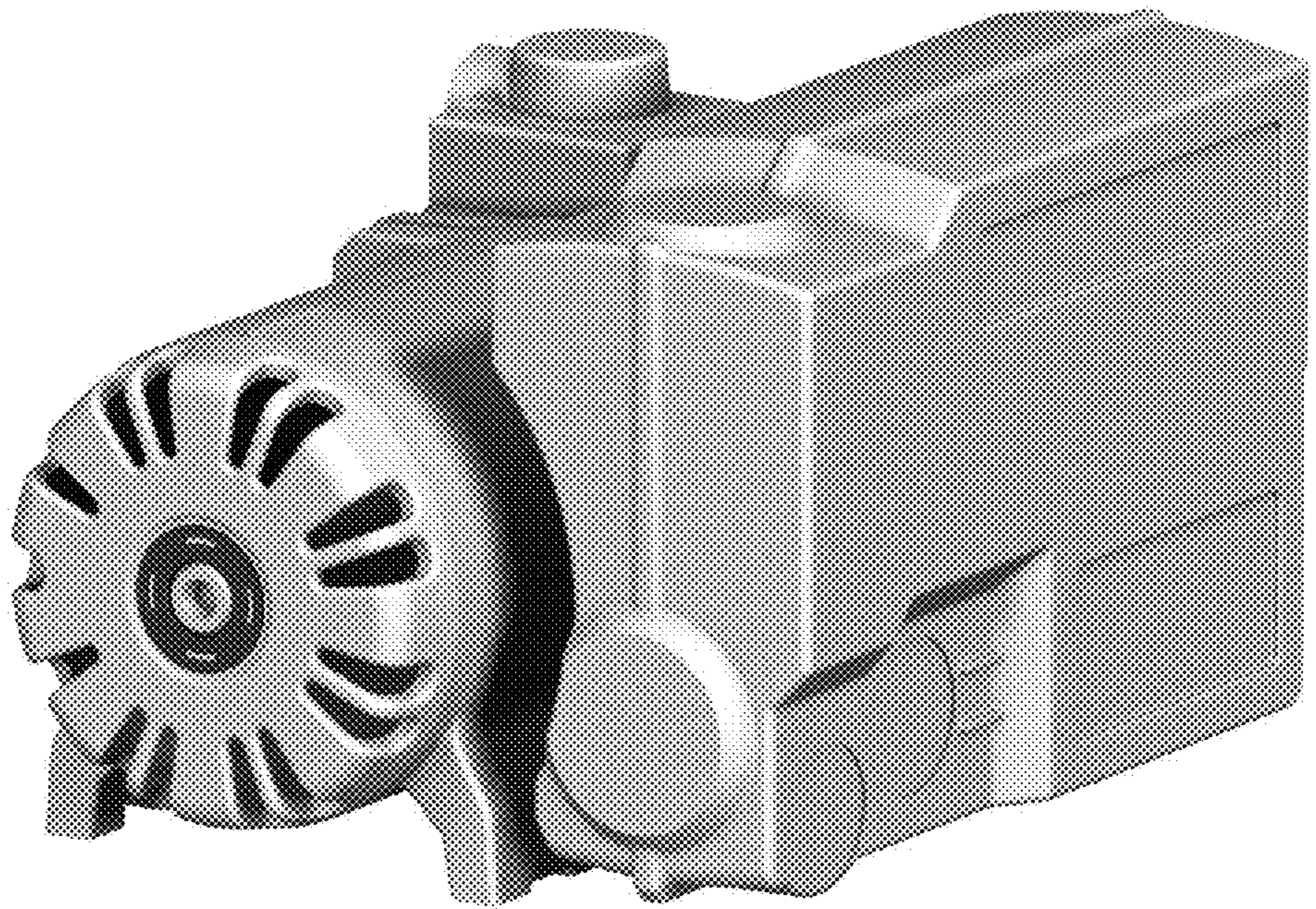
**References Cited**

U.S. PATENT DOCUMENTS

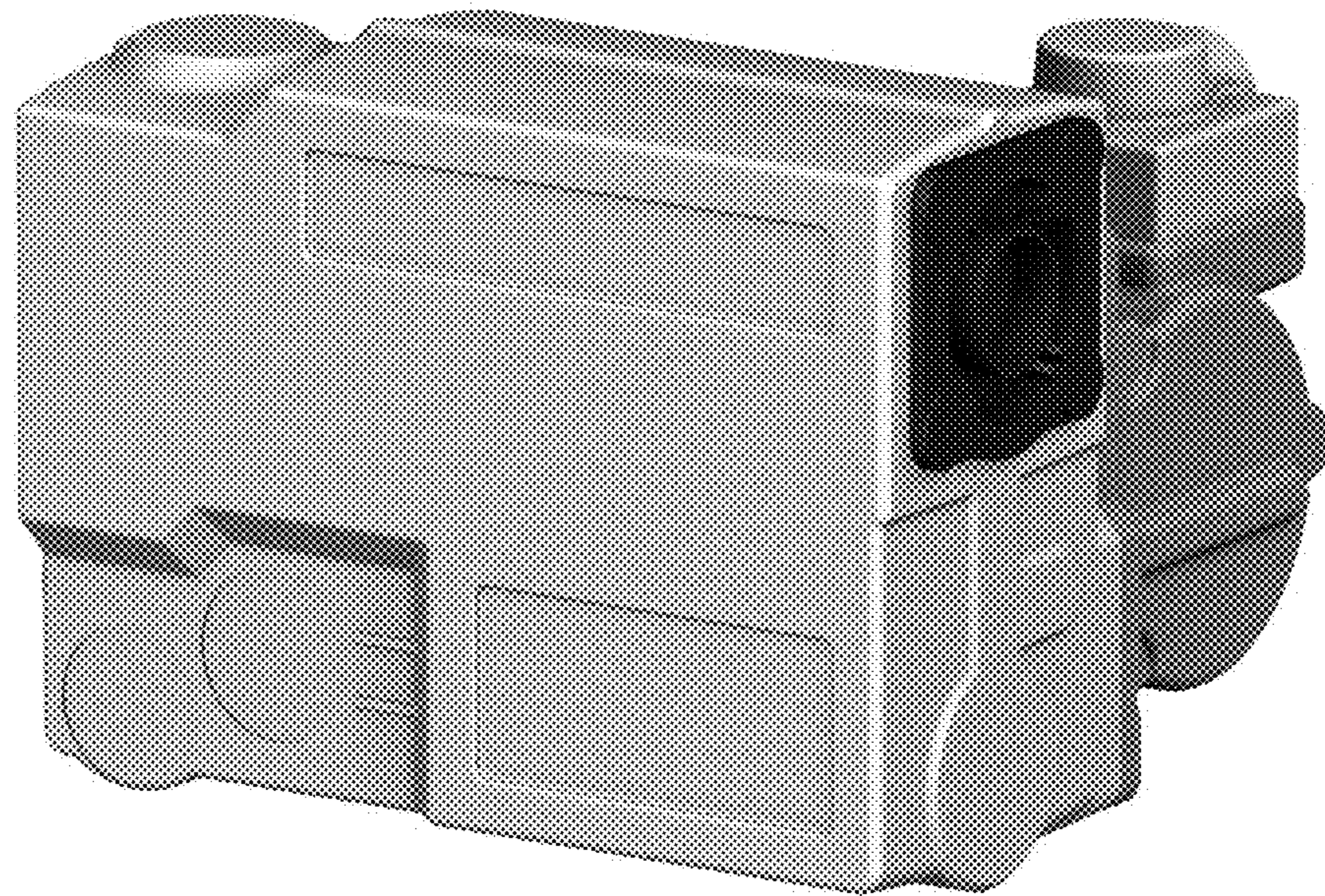
D765,147 S \* 8/2016 Schaller ..... D15/7  
D791,191 S \* 7/2017 Hartung ..... D15/7  
D842,340 S \* 3/2019 Kuang ..... D15/7

\* cited by examiner

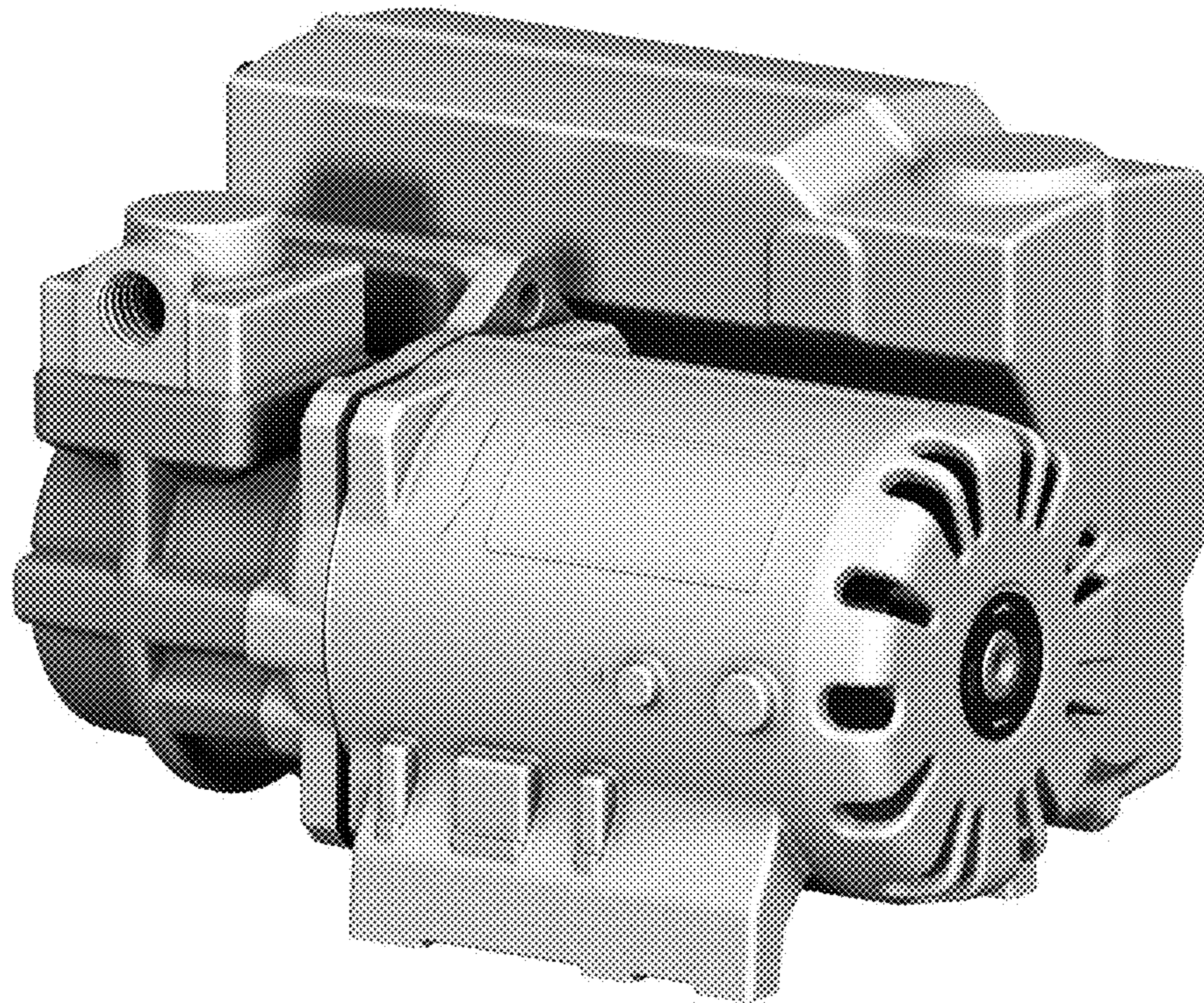
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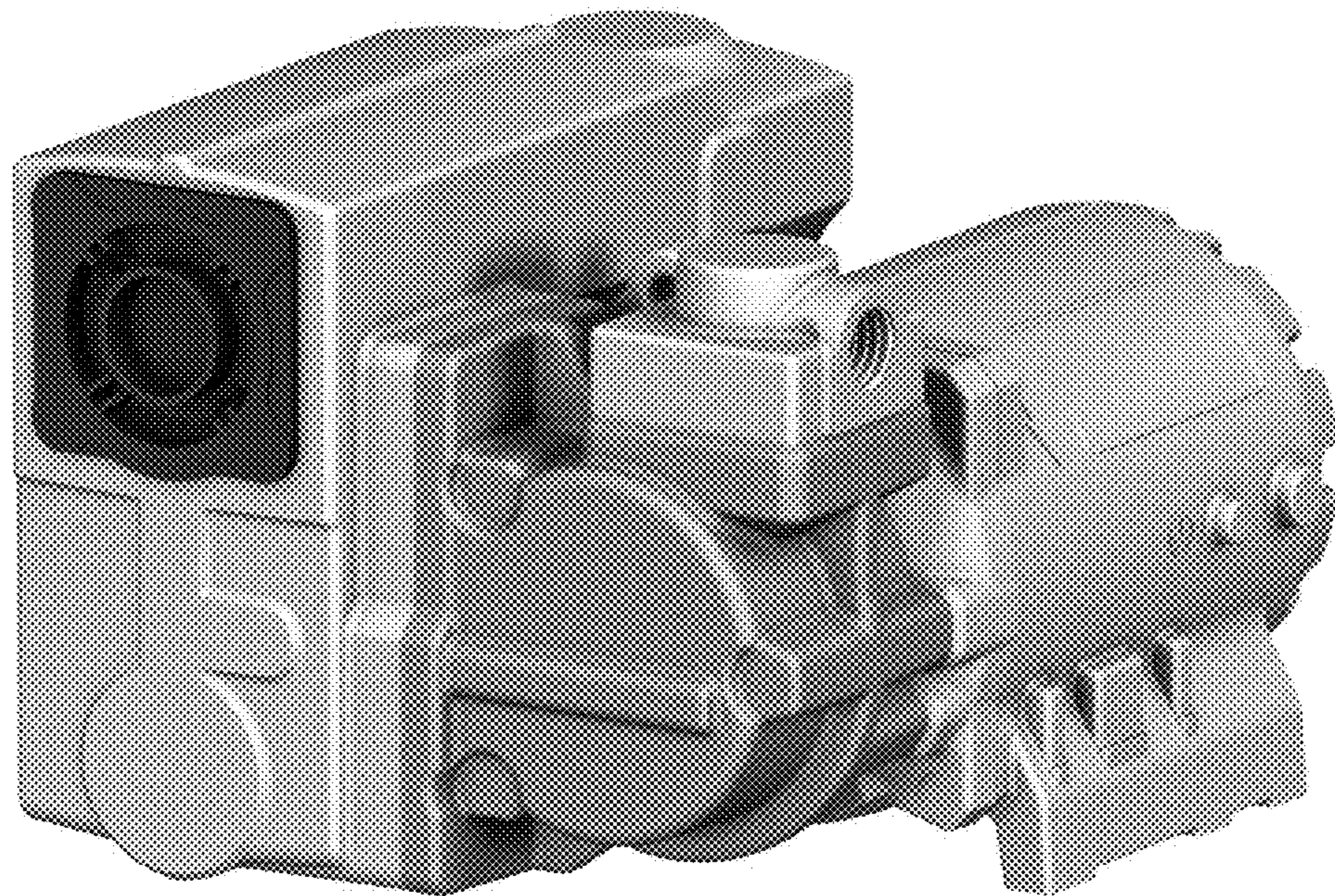
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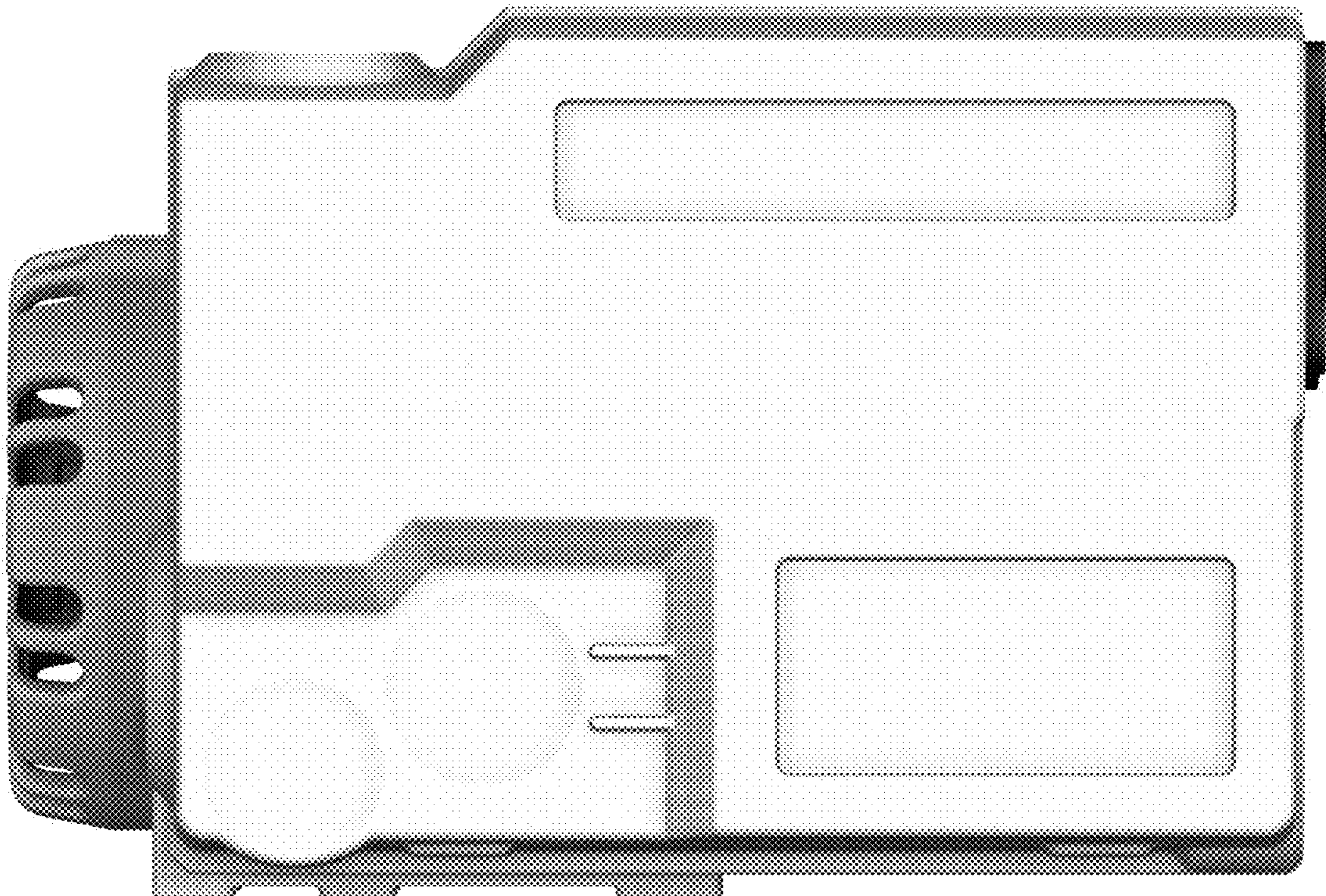
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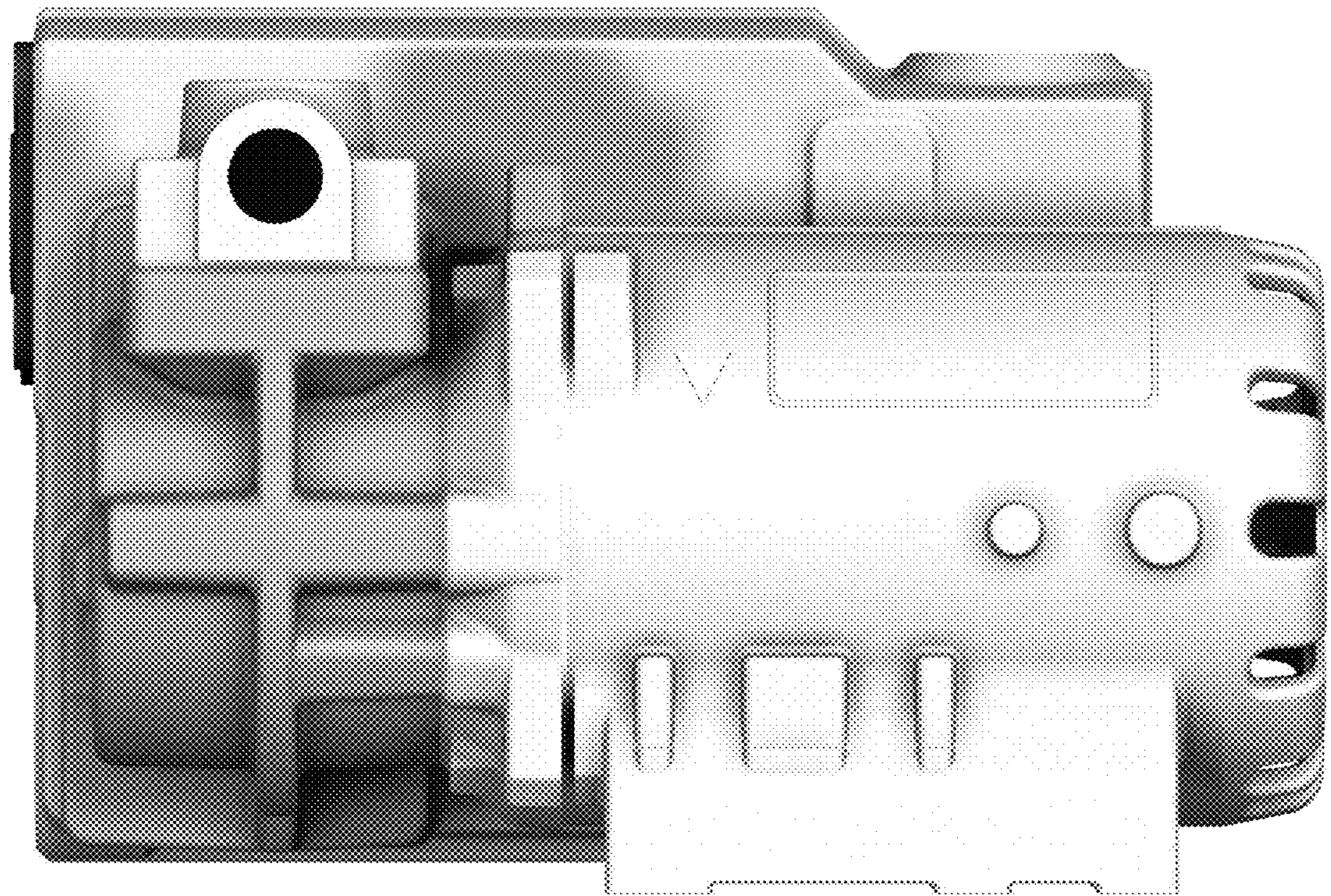
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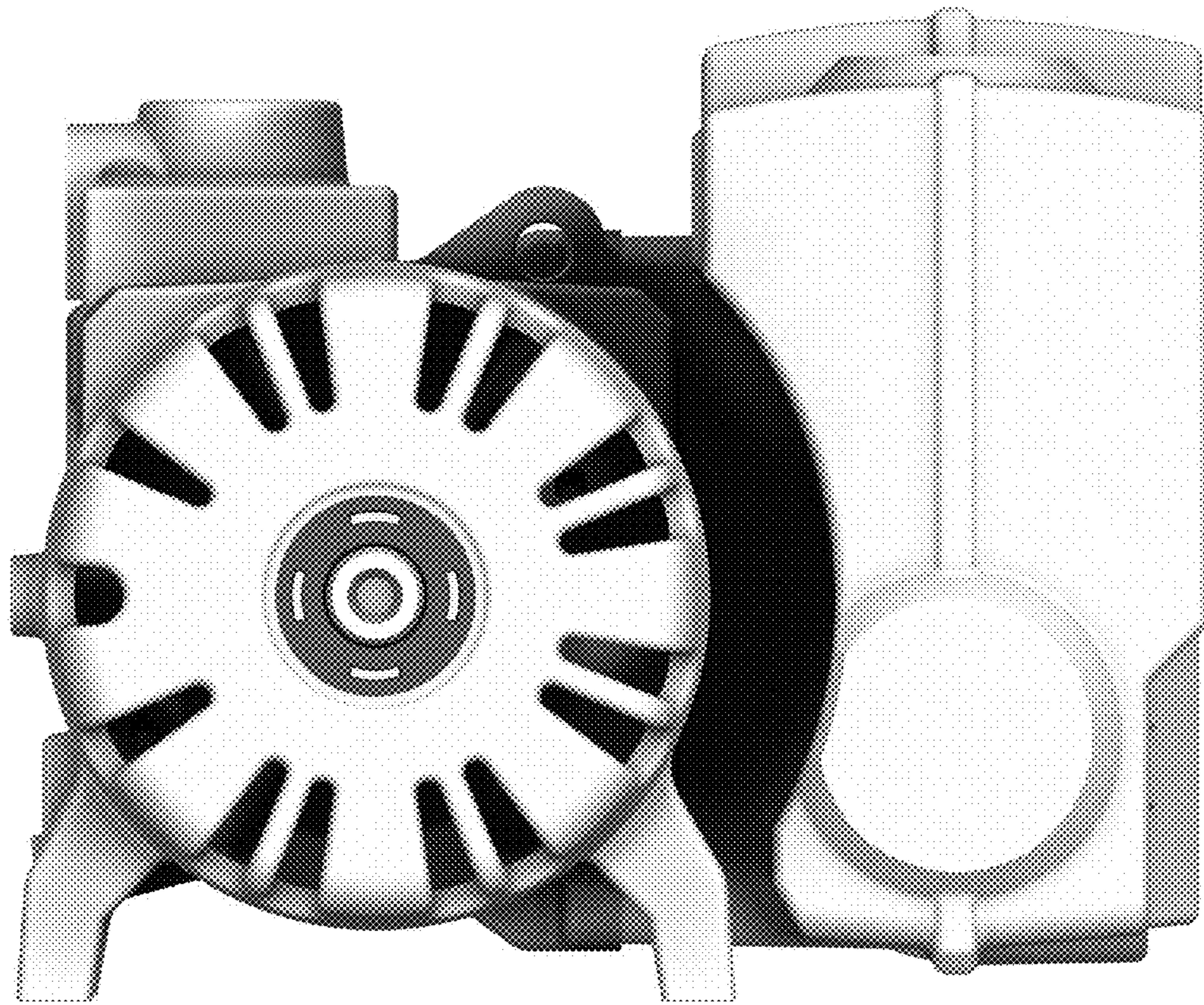


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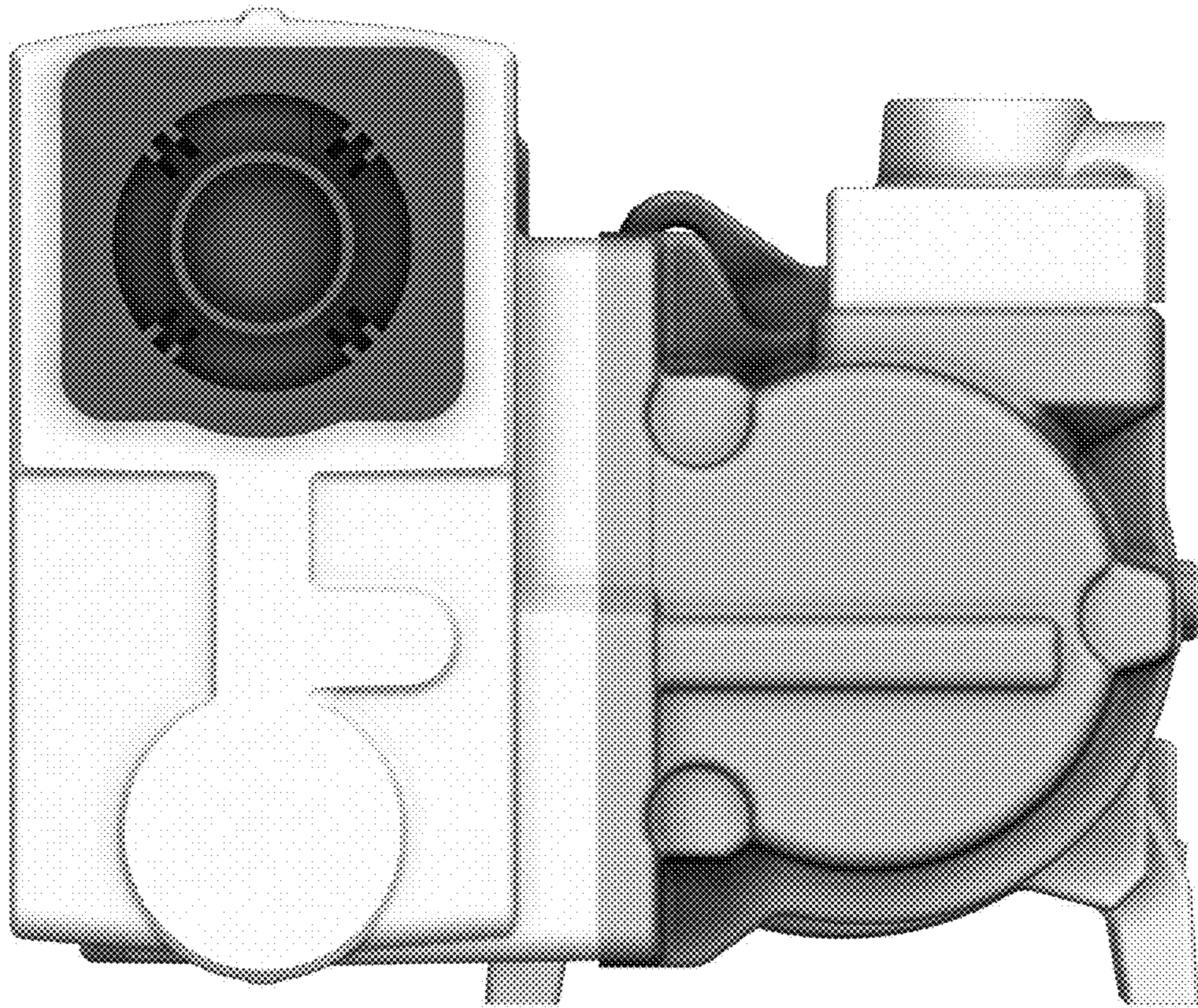




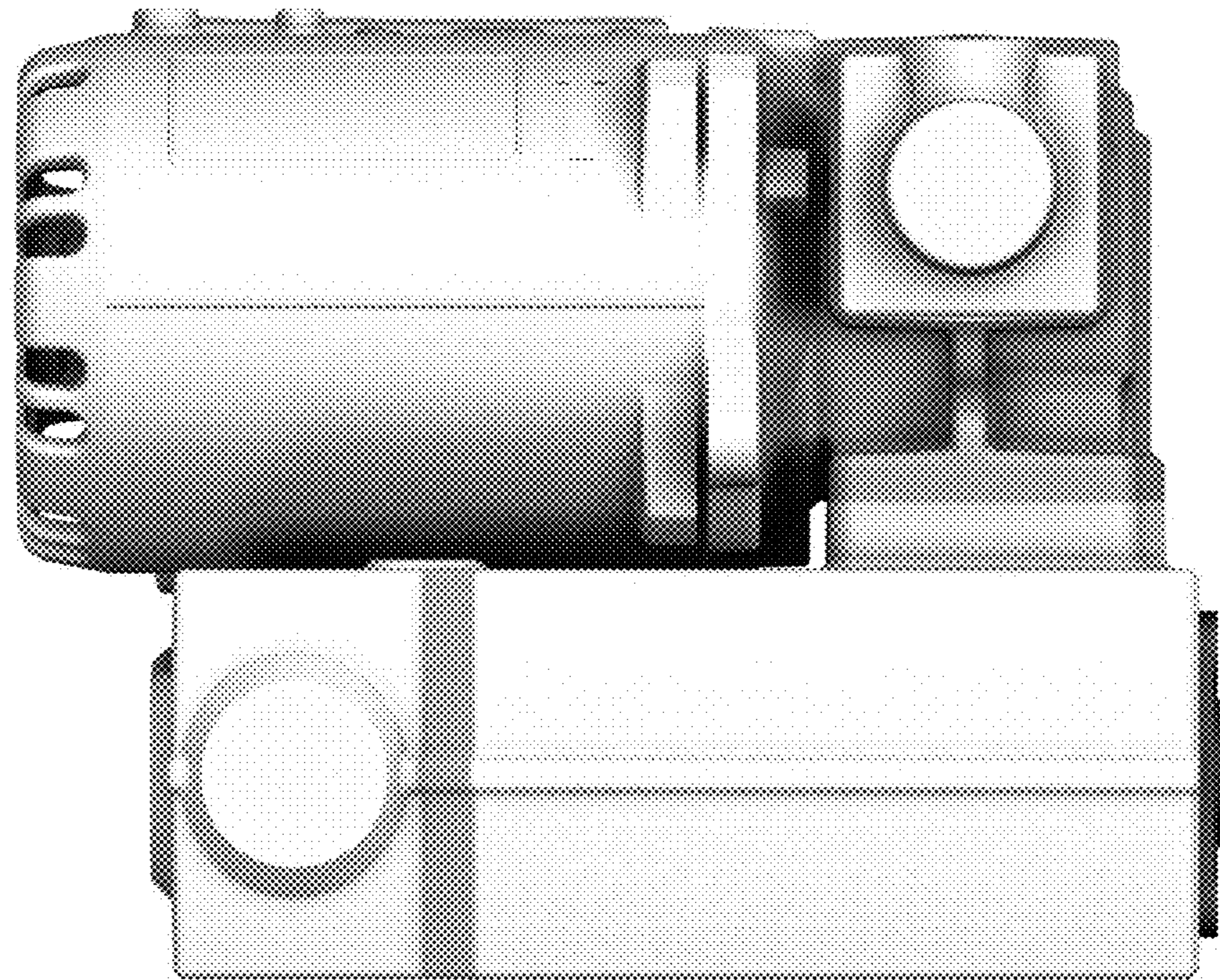
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1.8



1.9



1.10

