



US00D988498S

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

(10) **Patent No.:** **US D988,498 S**
(45) **Date of Patent:** **** Jun. 6, 2023**

(54) **FAN BLADE**

DESCRIPTION

- (71) Applicant: **DELTA ELECTRONICS, INC.**,
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Chien-Ming Lee, Taoyuan (TW); **Hao Tien**, Taoyuan (TW)
- (73) Assignee: **DELTA ELECTRONICS, INC.**,
Taoyuan (TW)
- (**) Term: **15 Years**
- (21) Appl. No.: **29/766,975**
- (22) Filed: **Jan. 20, 2021**
- (51) **LOC (14) Cl.** **23-03**
- (52) **U.S. Cl.**
USPC **D23/413**
- (58) **Field of Classification Search**
USPC D23/351-354, 370-385, 411-414;
D12/214, 339, 344

FIG. 1 is a perspective view of a first embodiment of a fan blade;
 FIG. 2 is a front elevational view thereof;
 FIG. 3 is a rear elevational view thereof;
 FIG. 4 is a left side elevational view thereof;
 FIG. 5 is a right side elevational view thereof;
 FIG. 6 is a top plan view thereof;
 FIG. 7 is a bottom plan view thereof;
 FIG. 8 is another perspective view thereof;
 FIG. 9 is a perspective view of a second embodiment of a fan blade;
 FIG. 10 is a front elevational view thereof;
 FIG. 11 is a rear elevational view thereof;
 FIG. 12 is a left side elevational view thereof;
 FIG. 13 is a right side elevational view thereof;
 FIG. 14 is a top plan view thereof;
 FIG. 15 is a bottom plan view thereof;
 FIG. 16 is another perspective view thereof;
 FIG. 17 is a perspective view of a third embodiment of a fan blade;
 FIG. 18 is a front elevational view thereof;
 FIG. 19 is a rear elevational view thereof;
 FIG. 20 is a left side elevational view thereof;
 FIG. 21 is a right side elevational view thereof;
 FIG. 22 is a top plan view thereof;
 FIG. 23 is a bottom plan view thereof;
 FIG. 24 is another perspective view thereof;
 FIG. 25 is a perspective view of a fourth embodiment of a fan blade;
 FIG. 26 is a front elevational view thereof;
 FIG. 27 is a rear elevational view thereof;
 FIG. 28 is a left side elevational view thereof;
 FIG. 29 is a right side elevational view thereof;
 FIG. 30 is a top plan view thereof;
 FIG. 31 is a bottom plan view thereof; and,
 FIG. 32 is another perspective view thereof.

The broken lines in the drawings illustrate portions of the fan blade which form no part of the claimed design. Shading is used to illustrate the curvature of the part and not color. The claimed design is indicated by the relatively dark portions in the drawings, while the relatively light portions are environmental and form no part of the claimed design.

(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

- D559,968 S * 1/2008 Lee D23/379
 - D564,653 S * 3/2008 Iwase D23/413
- (Continued)

FOREIGN PATENT DOCUMENTS

- CN 303817796 S 8/2016
- TW D110885 5/2006

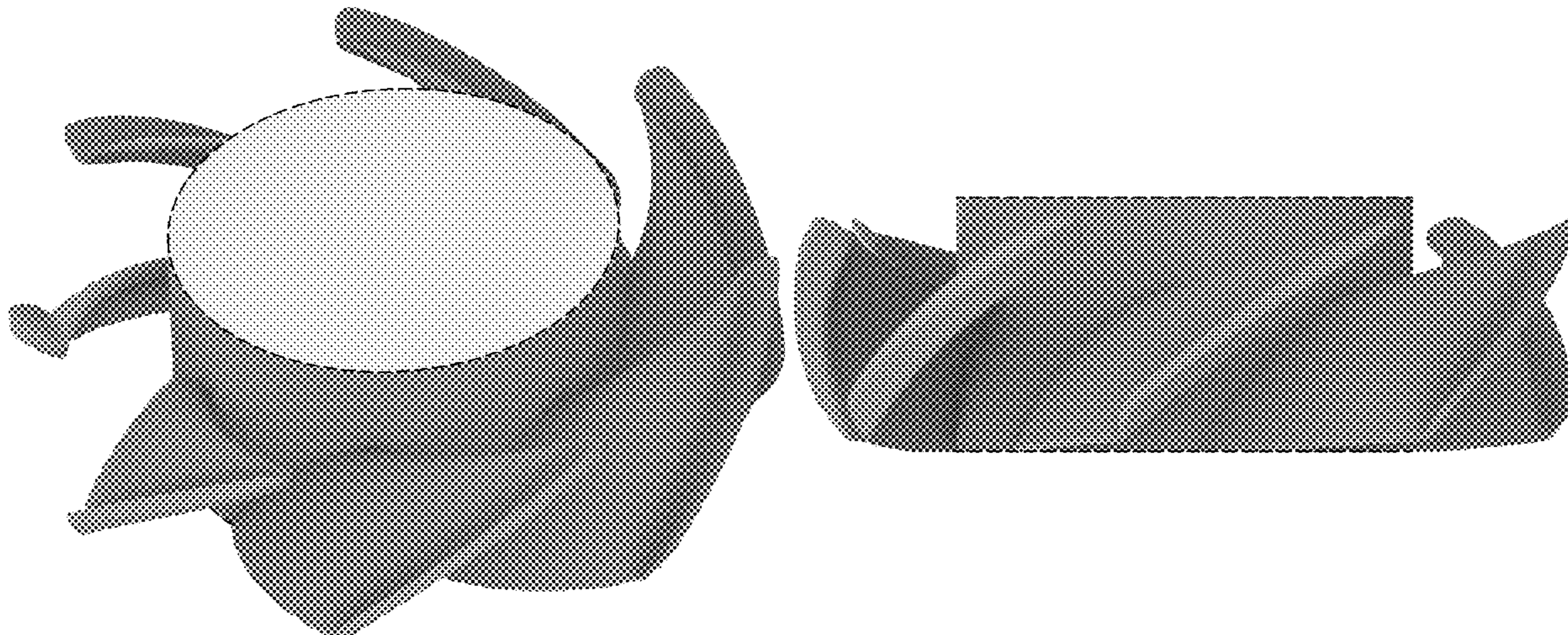
Primary Examiner — Sharon S Oum

(74) *Attorney, Agent, or Firm* — CKC & Partners Co., LLC

(57) **CLAIM**

The ornamental design for a fan blade, as shown and described.

1 Claim, 32 Drawing Sheets



(58) **Field of Classification Search**

CPC F04D 29/38; F04D 29/384; F04D 29/386;
 F04D 29/388; F04D 29/324

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D570,471	S *	6/2008	Iwase	.....	D23/413
D570,996	S *	6/2008	Harman	.....	D23/413
D570,999	S *	6/2008	Harman	.....	D23/413
D571,000	S *	6/2008	Bei	.....	D23/413
D585,130	S *	1/2009	Harman	.....	D23/413
D681,188	S *	4/2013	Hu	.....	D23/413
D755,945	S *	5/2016	Arai	.....	D23/416
D755,947	S *	5/2016	Arai	.....	D23/379
D804,647	S *	12/2017	Chang	.....	D23/413
10,428,830	B2 *	10/2019	Lee	.....	F04D 29/164
10,563,659	B2 *	2/2020	Liu	.....	F04D 29/703
10,655,639	B2 *	5/2020	Chang	.....	F04D 29/662
D910,834	S *	2/2021	Wang	.....	F04D 29/384
					D23/379
D936,822	S *	11/2021	Lee	.....	D23/379
D938,011	S *	12/2021	Robinson	.....	D23/413
2012/0171043	A1 *	7/2012	Lee	.....	F04D 29/384
					416/235
2014/0356149	A1 *	12/2014	Chang	.....	F04D 29/325
					415/193
2015/0064009	A1 *	3/2015	Huang	.....	F04D 25/0613
					416/174
2015/0204342	A1 *	7/2015	Liang	.....	B29C 33/485
					416/223 R
2020/0373804	A1 *	11/2020	Chou	.....	F04D 25/0693
2022/0145899	A1 *	5/2022	Chiu	.....	F04D 29/66

* cited by examiner

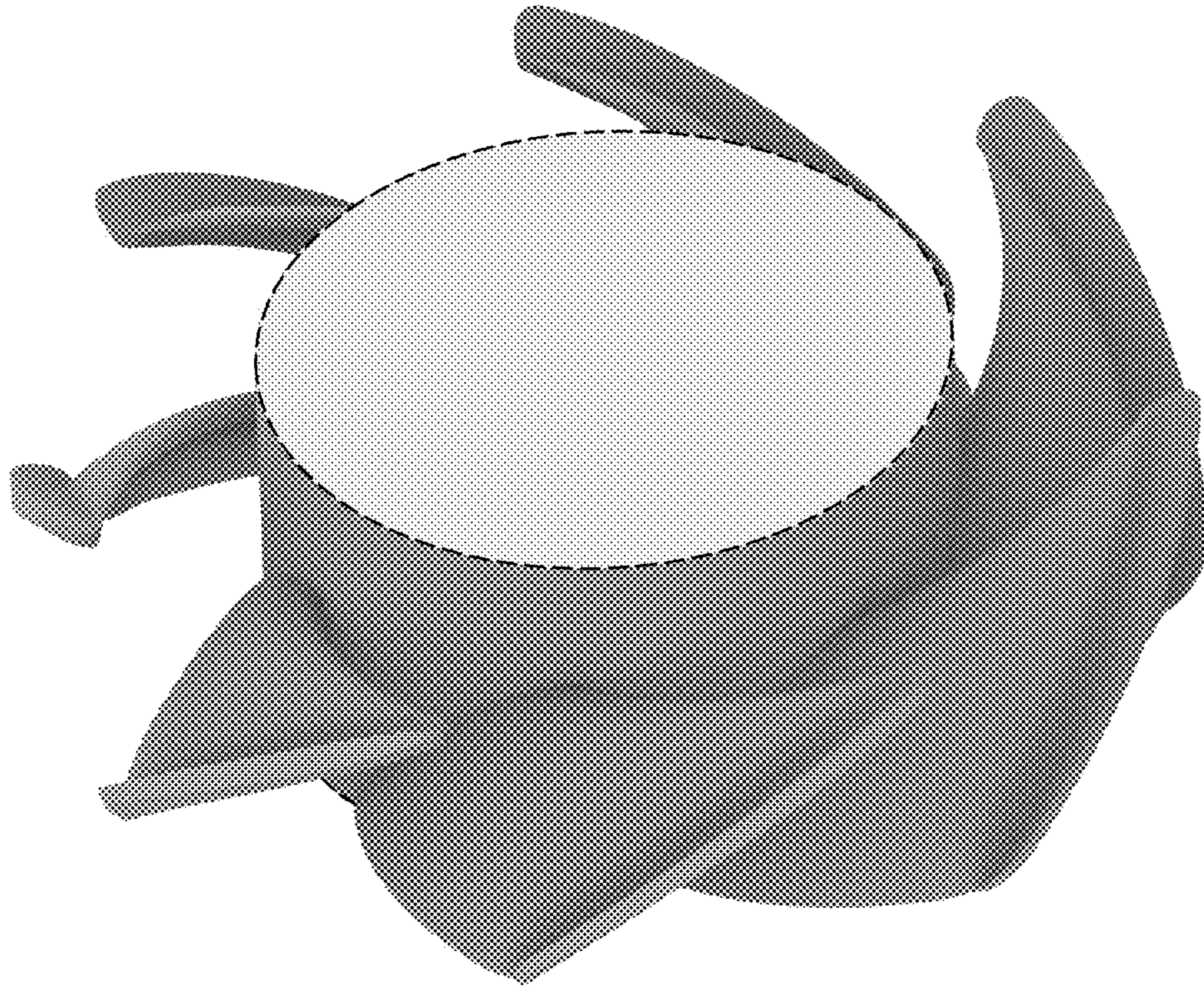


Fig. 1

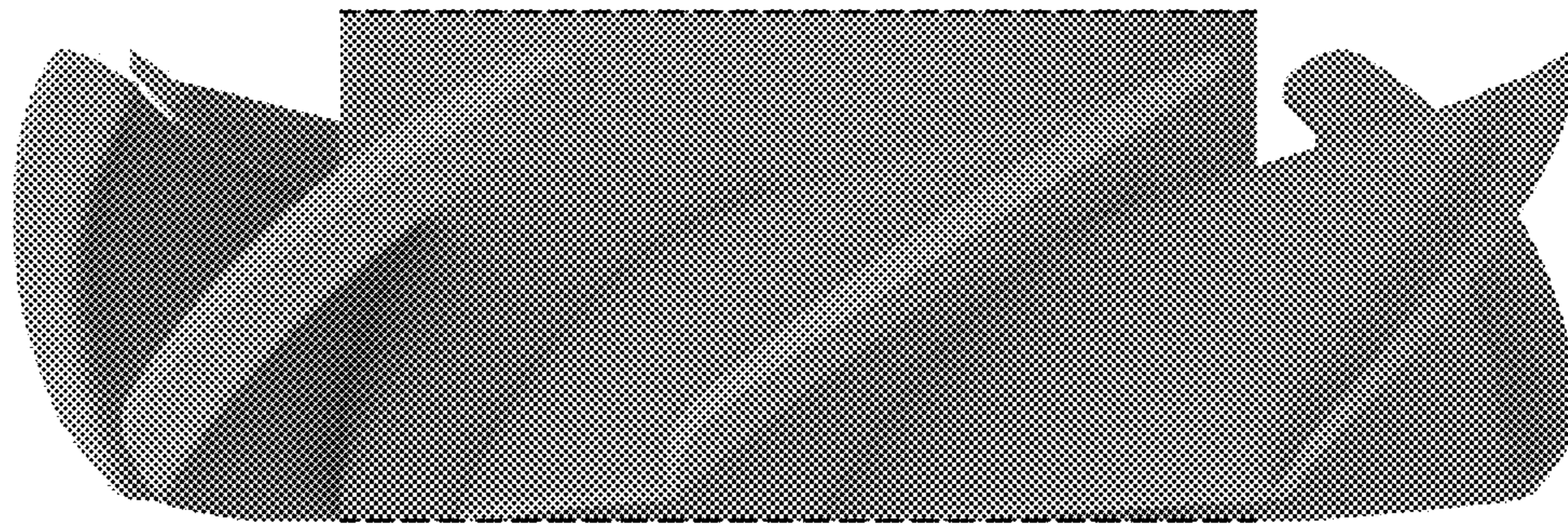


Fig. 2

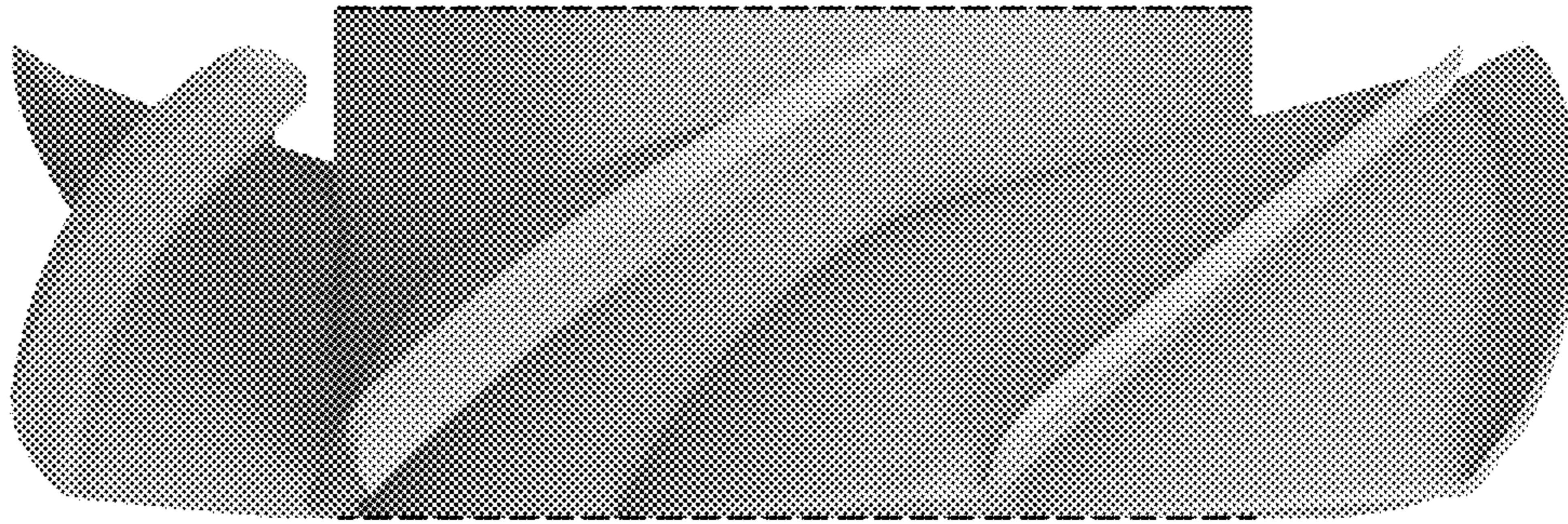


Fig. 3

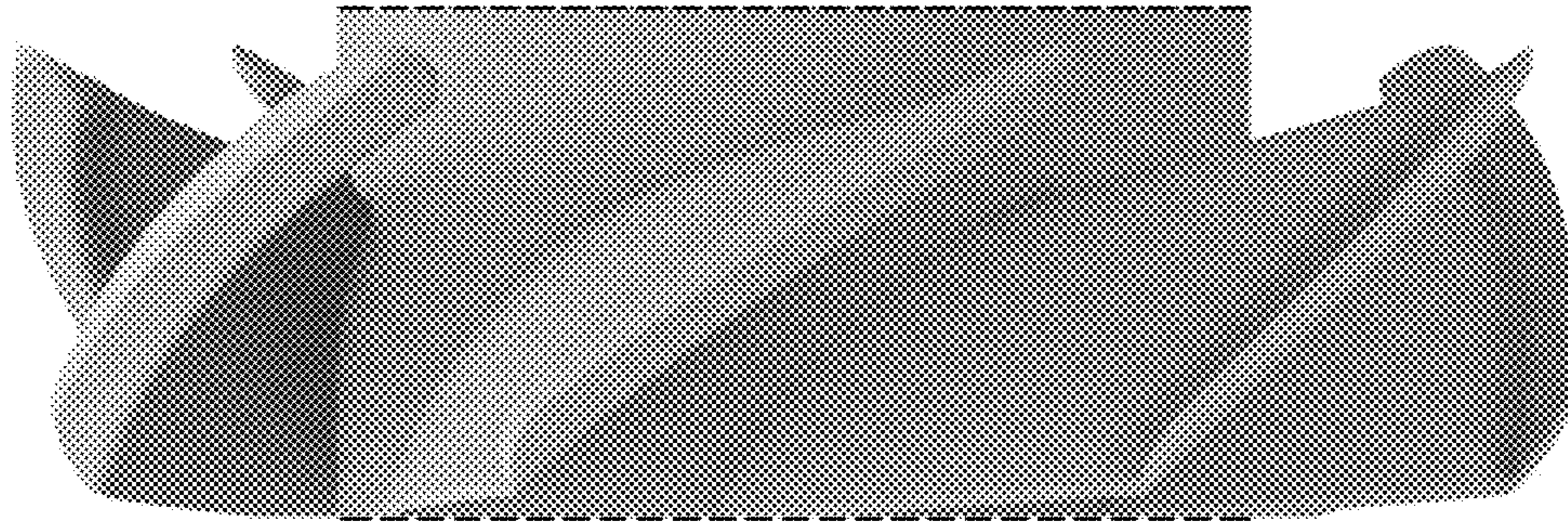


Fig. 4

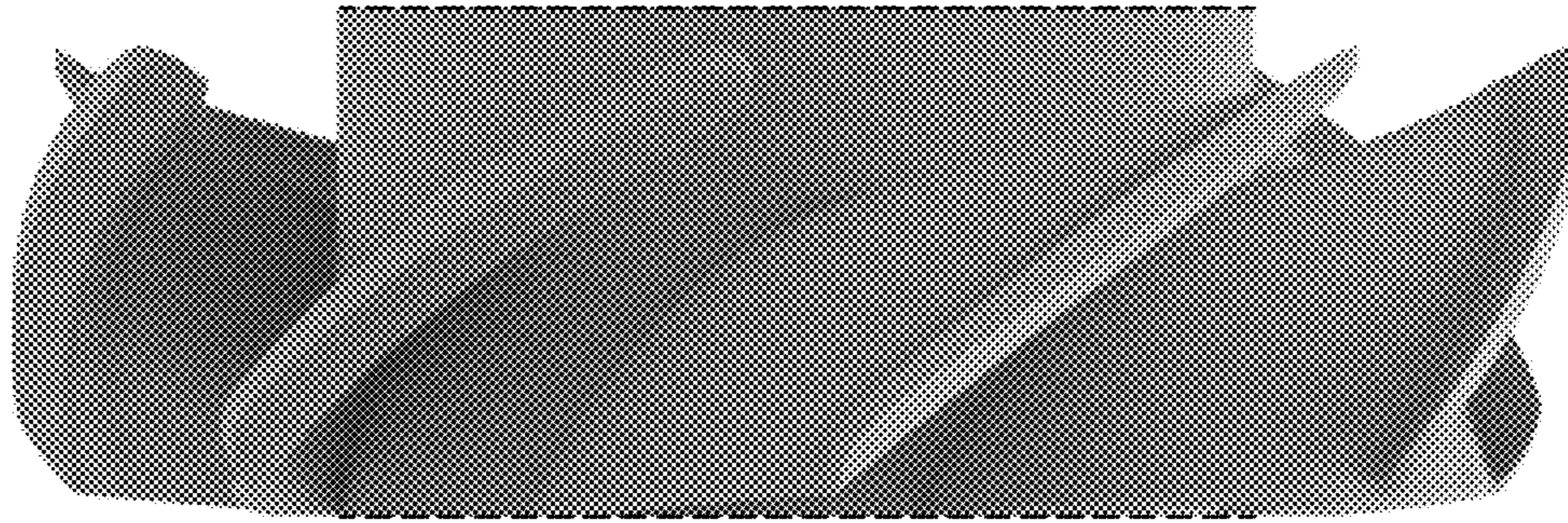


Fig. 5

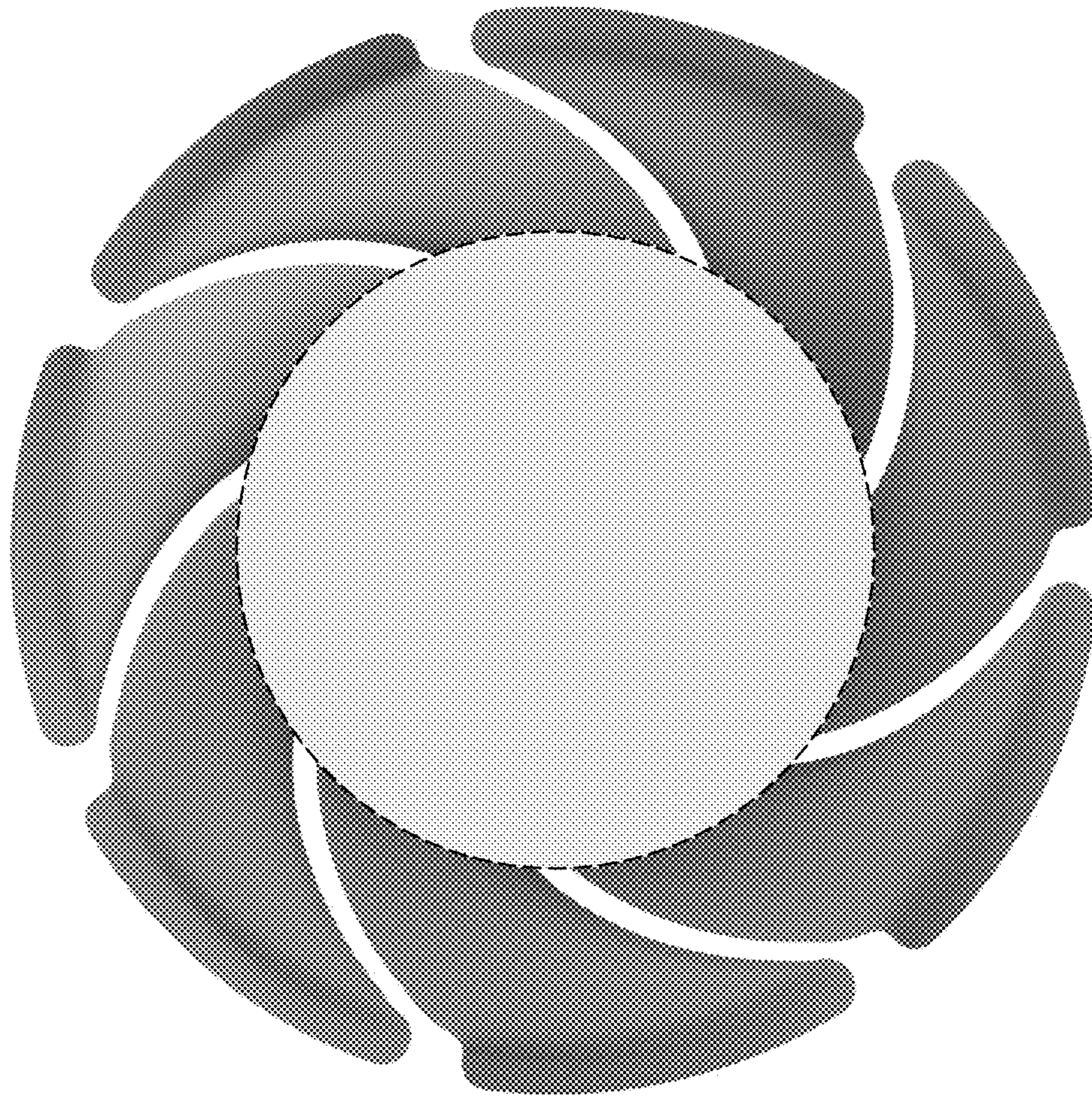


Fig. 6

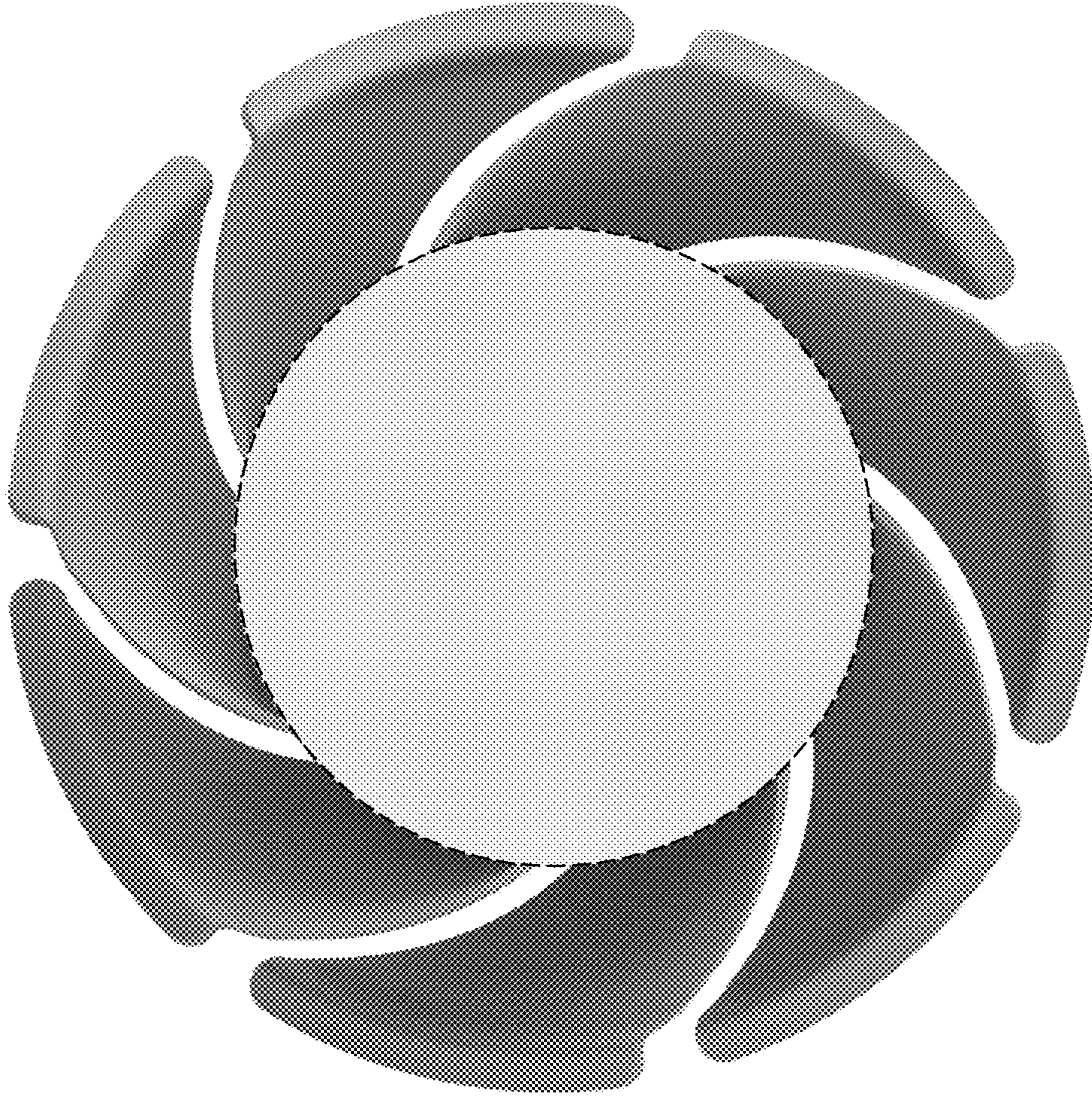


Fig. 7

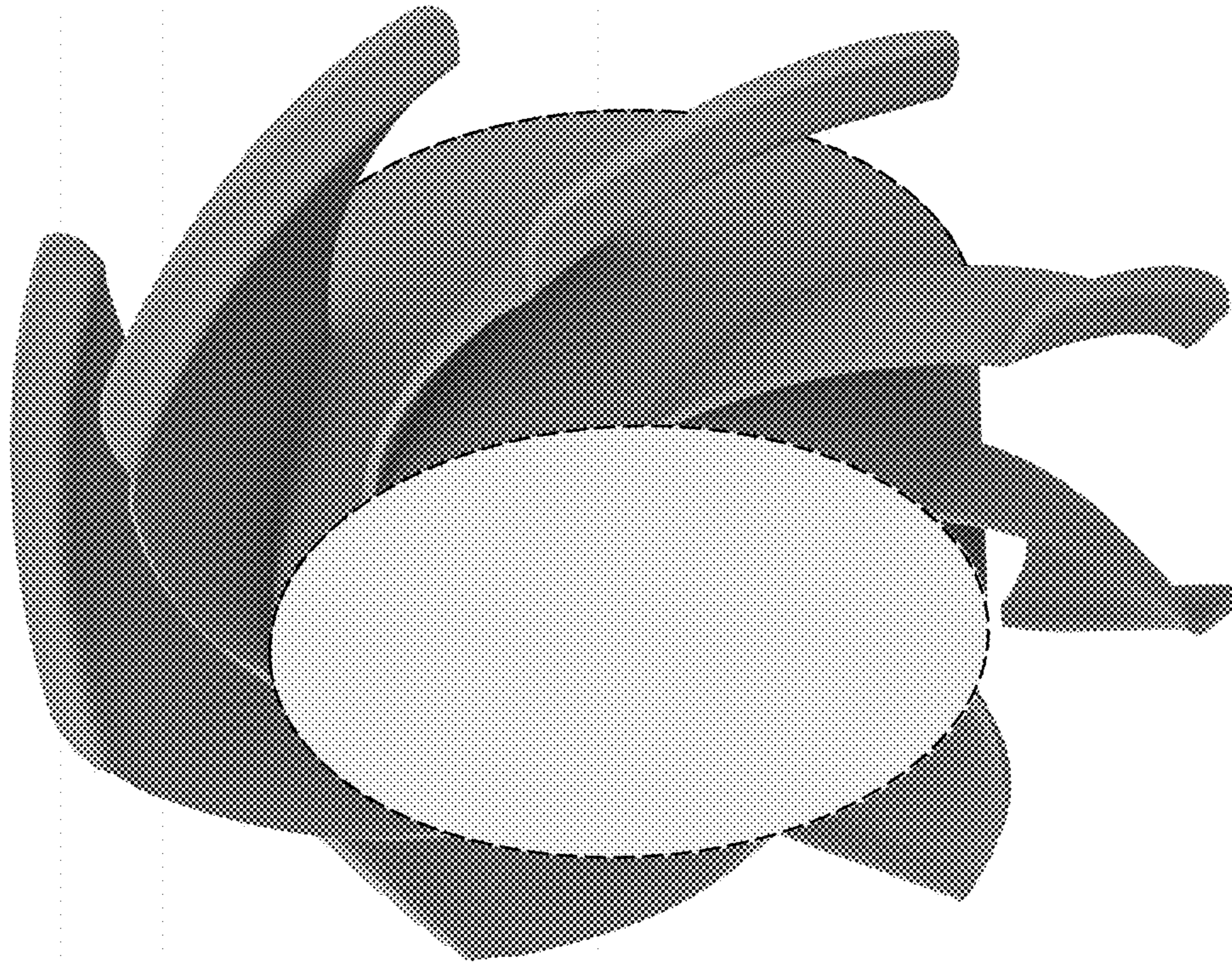


Fig. 8

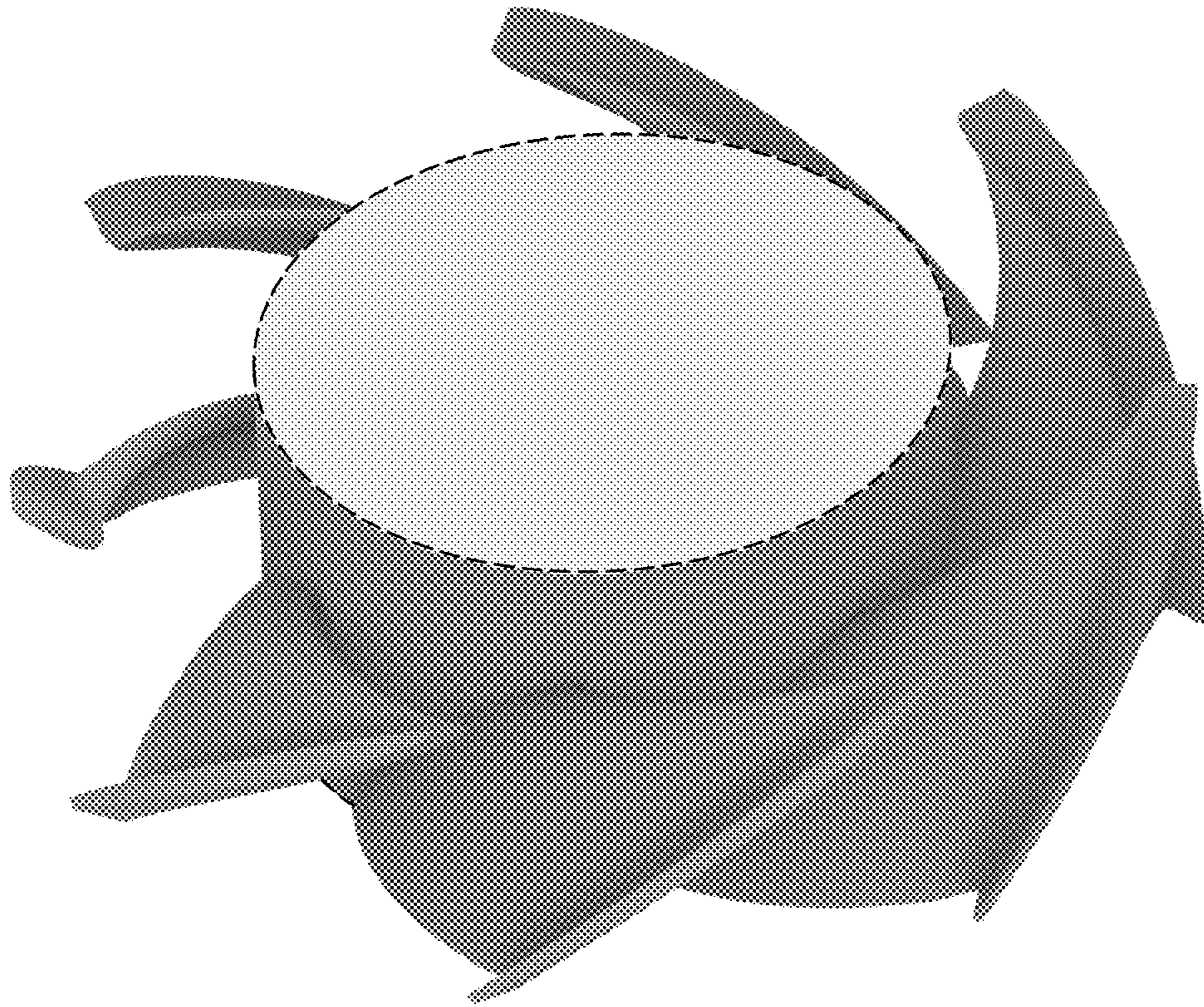


Fig. 9

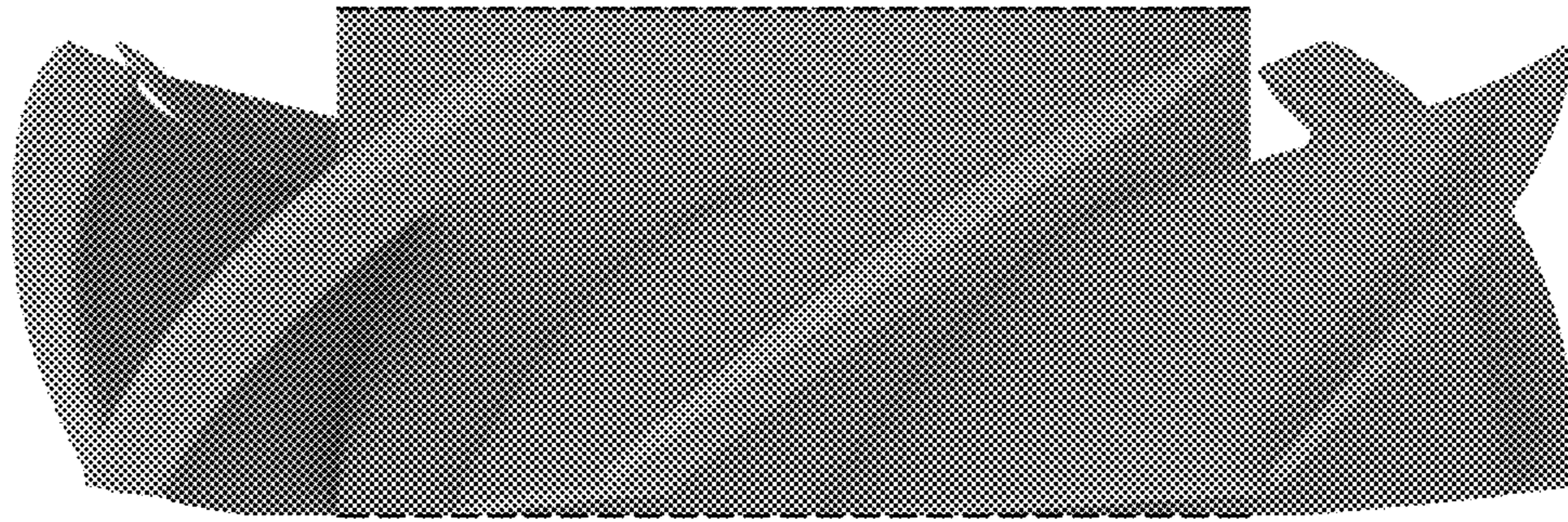


Fig. 10

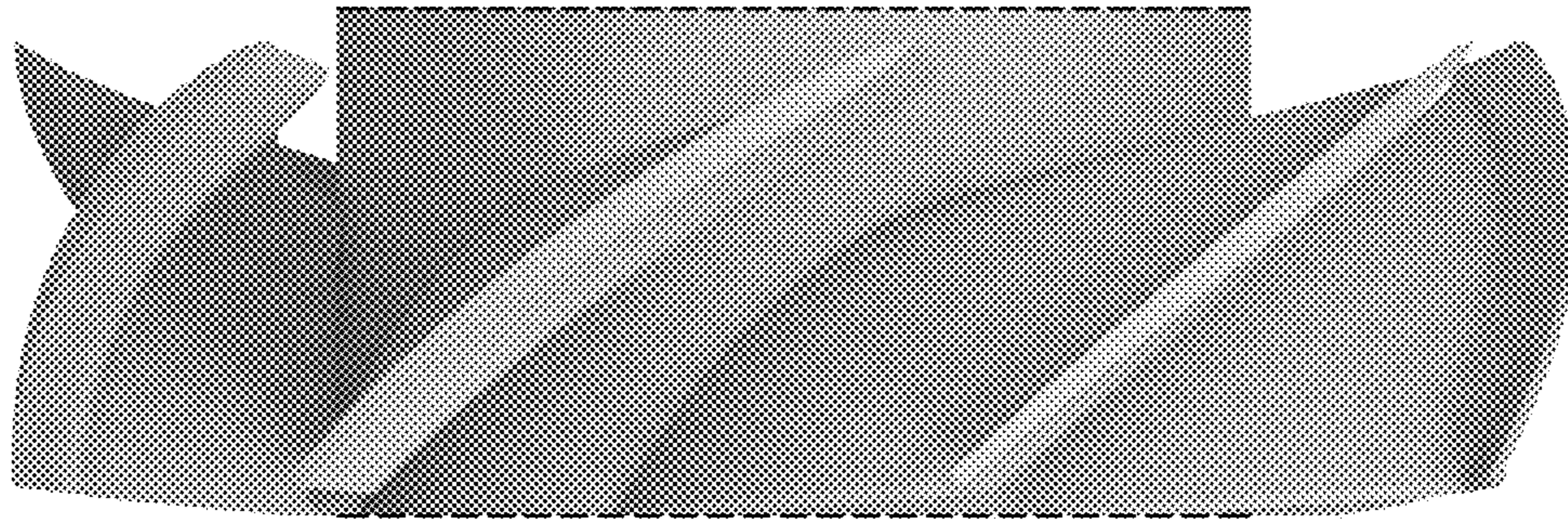


Fig. 11

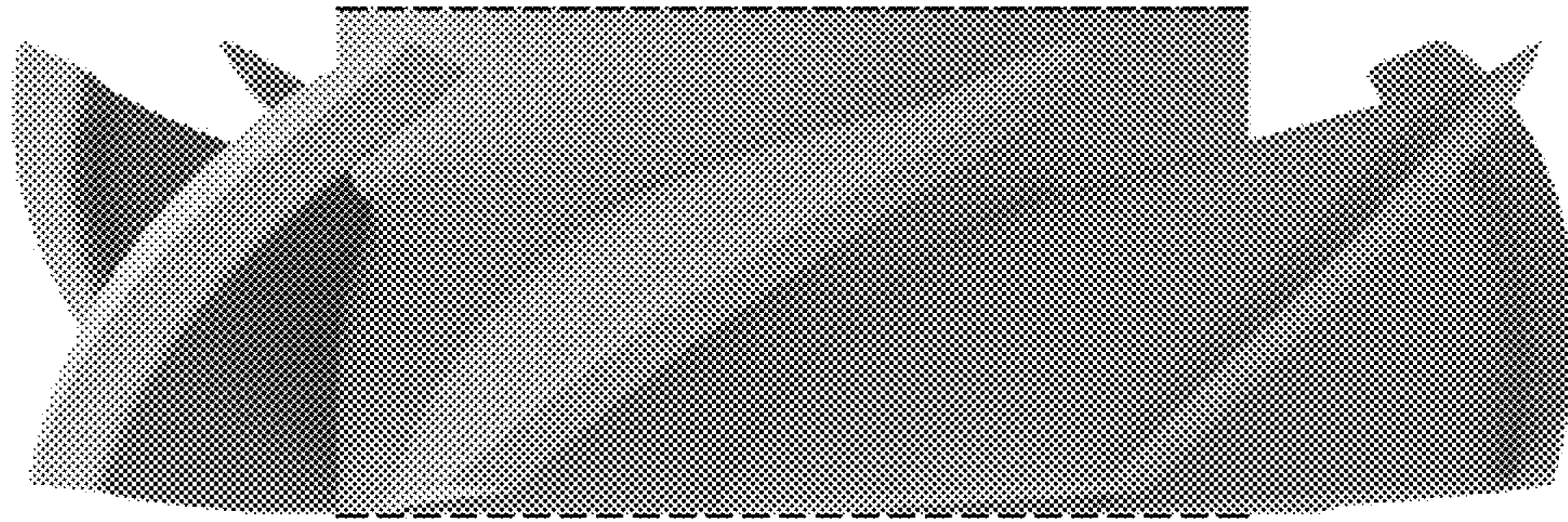


Fig. 12

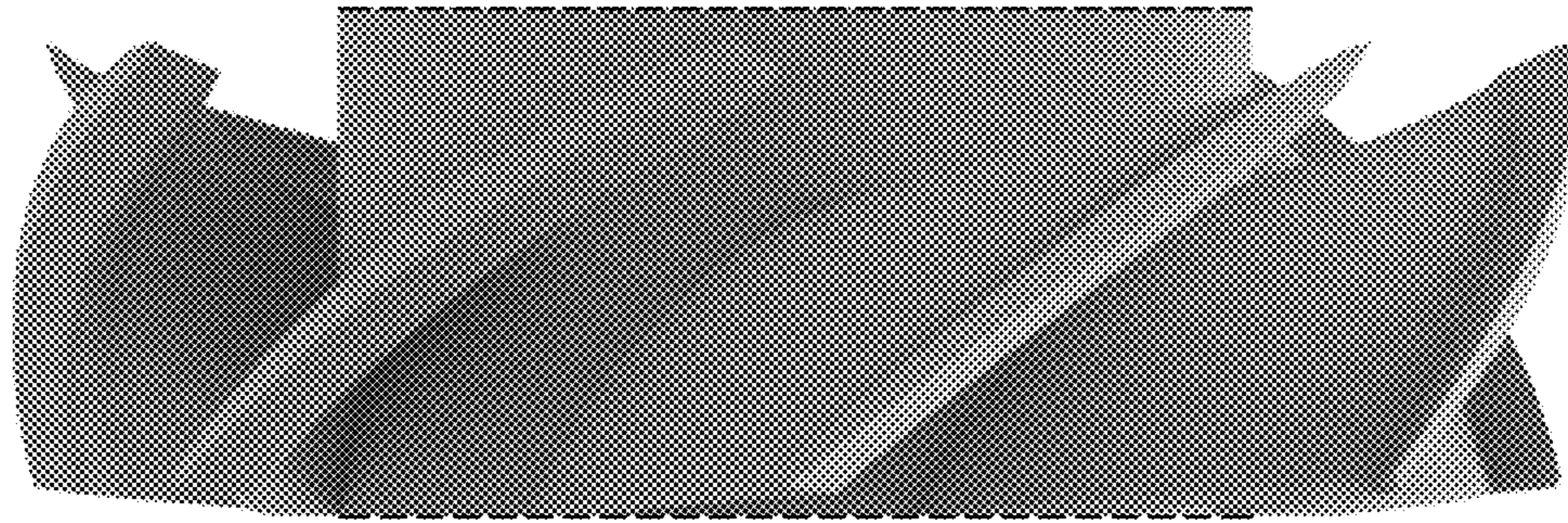


Fig. 13

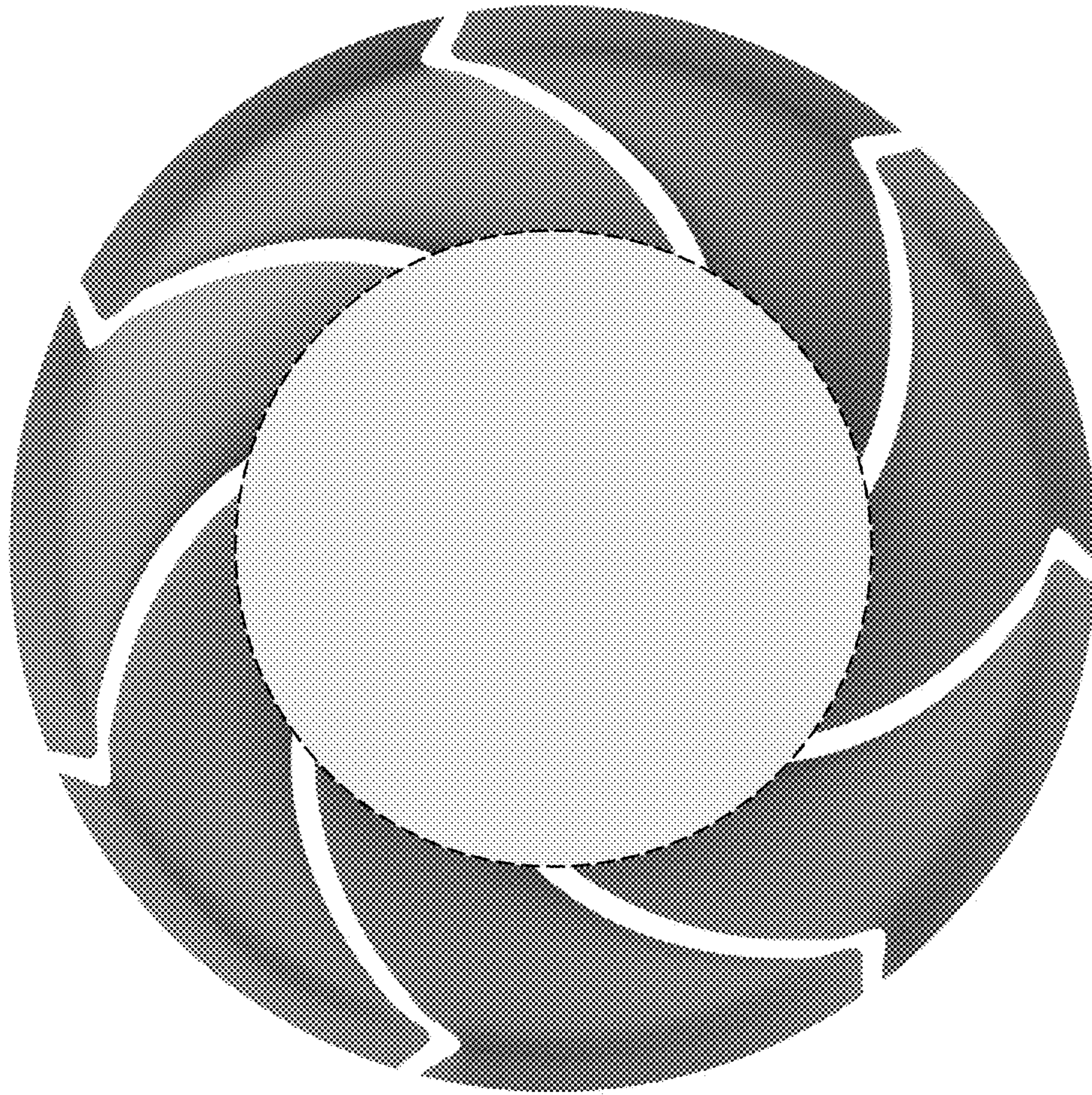


Fig. 14

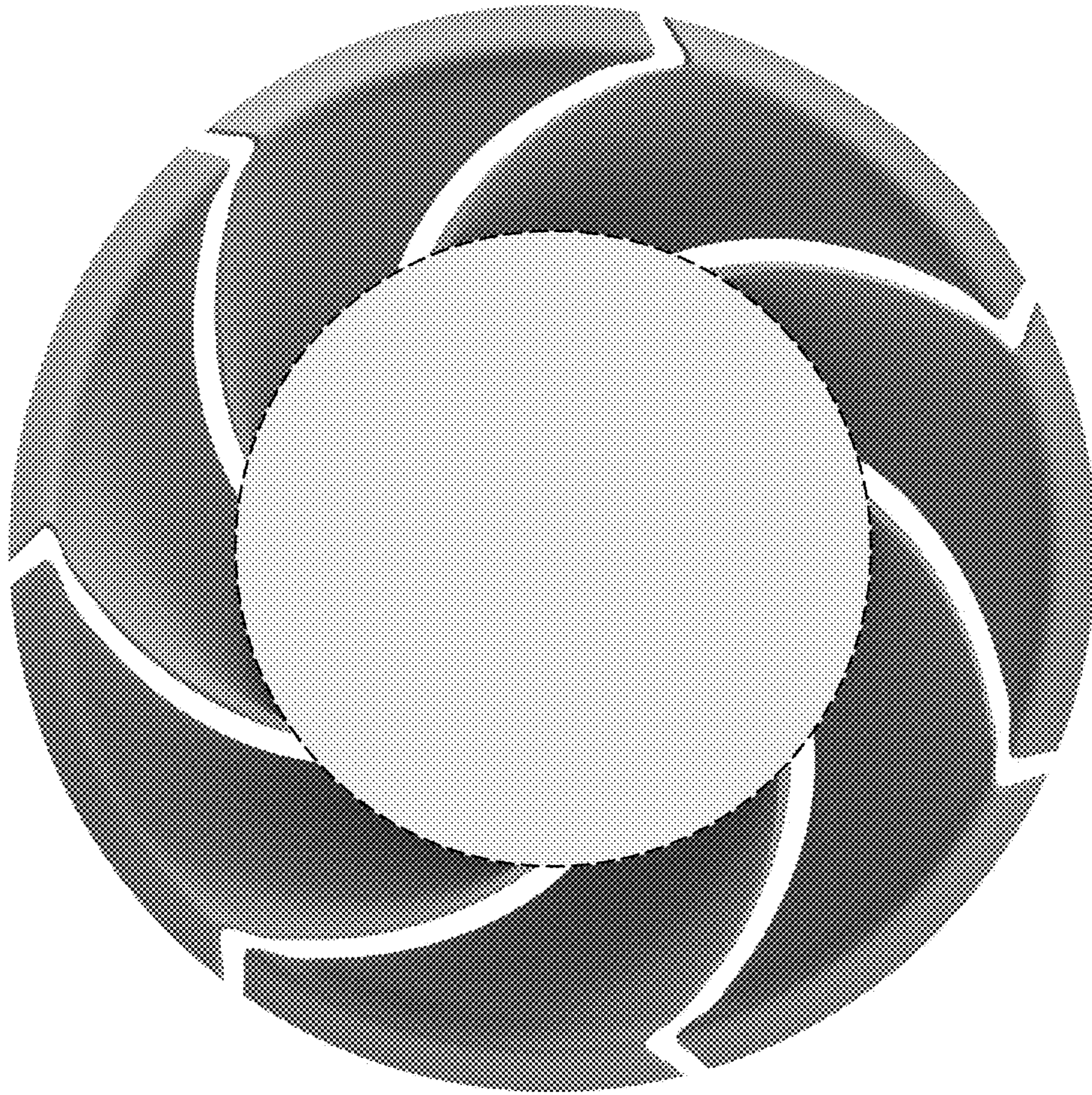


Fig. 15

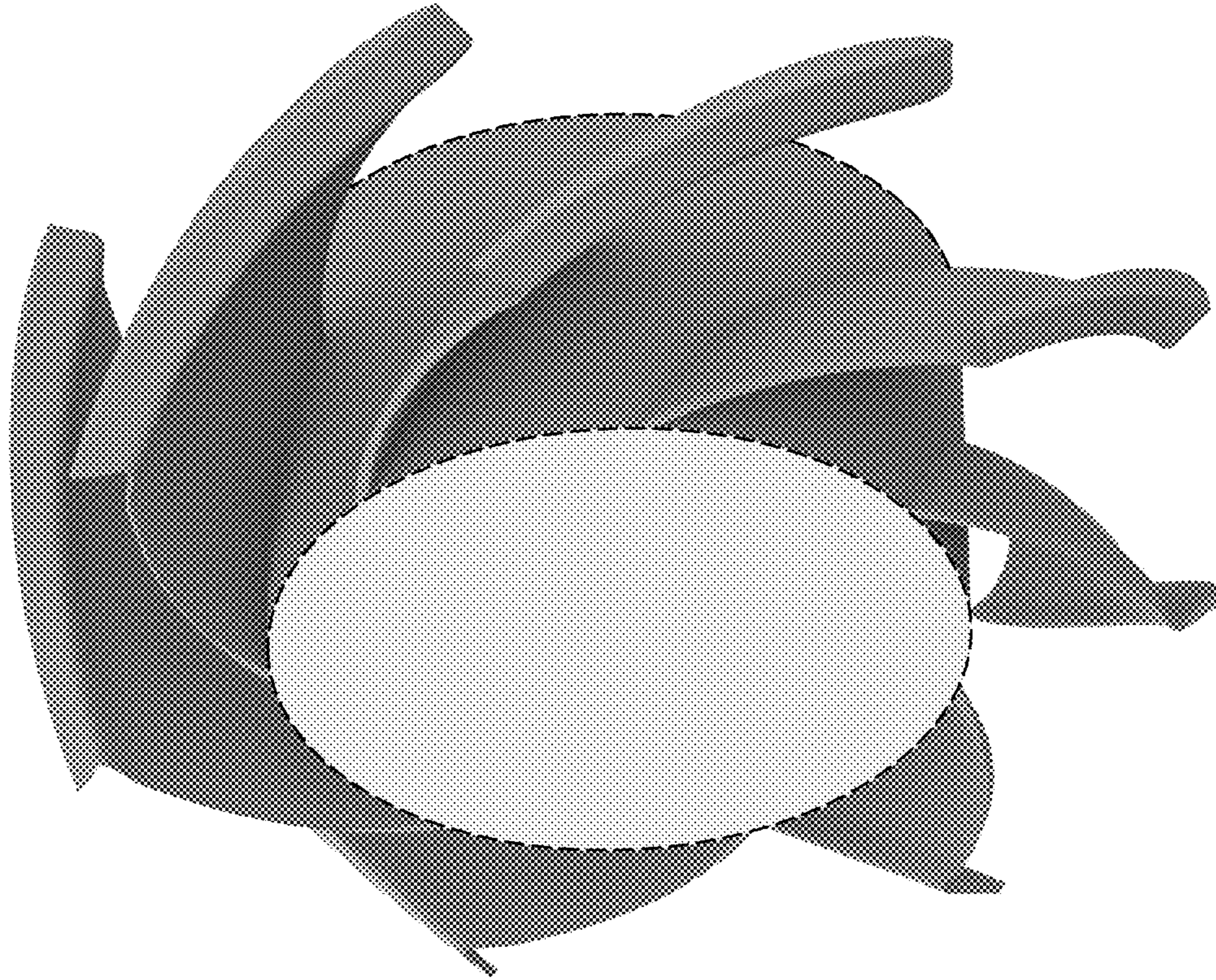


Fig. 16

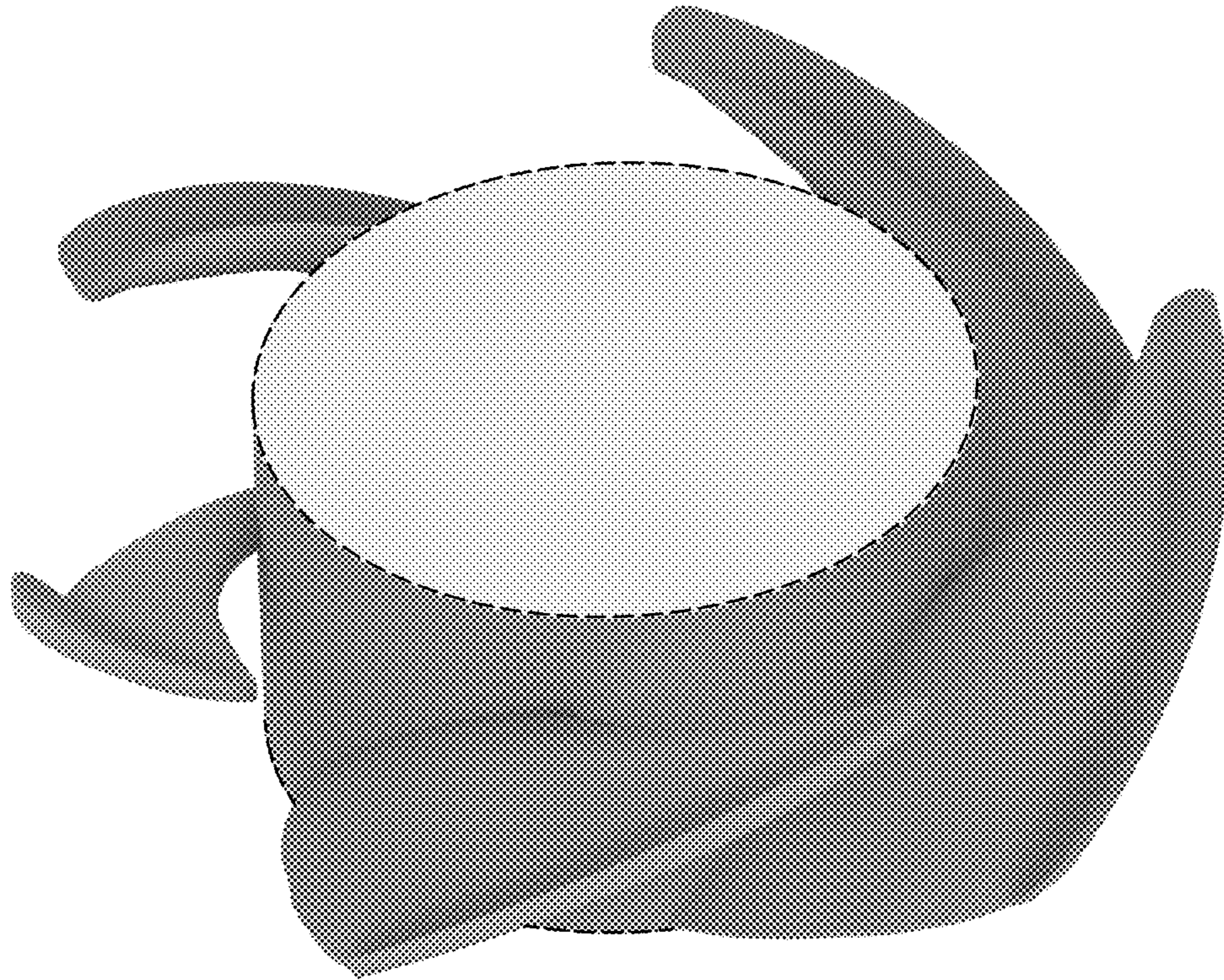


Fig. 17

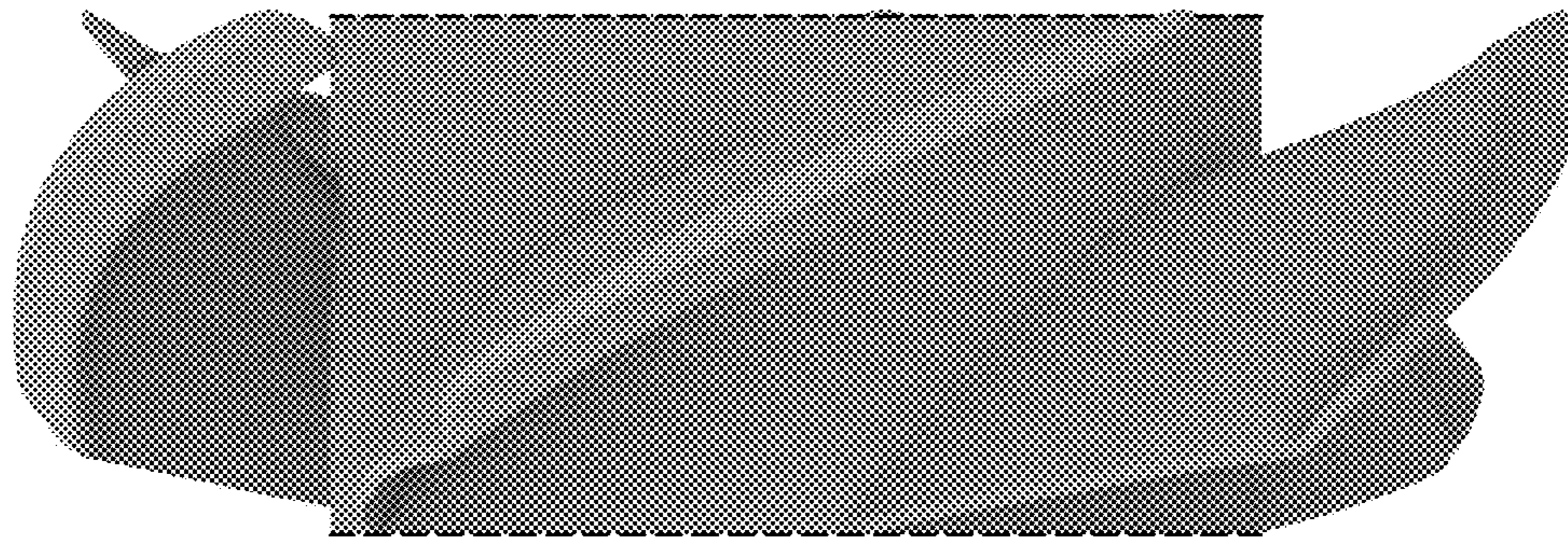


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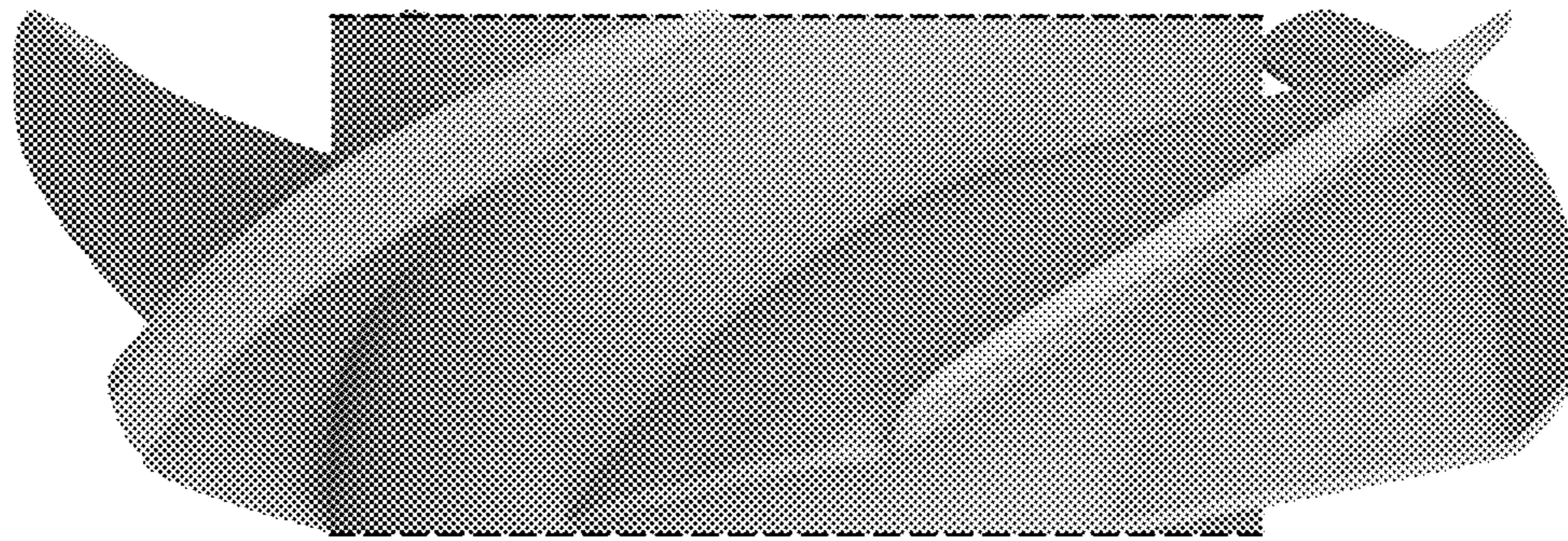


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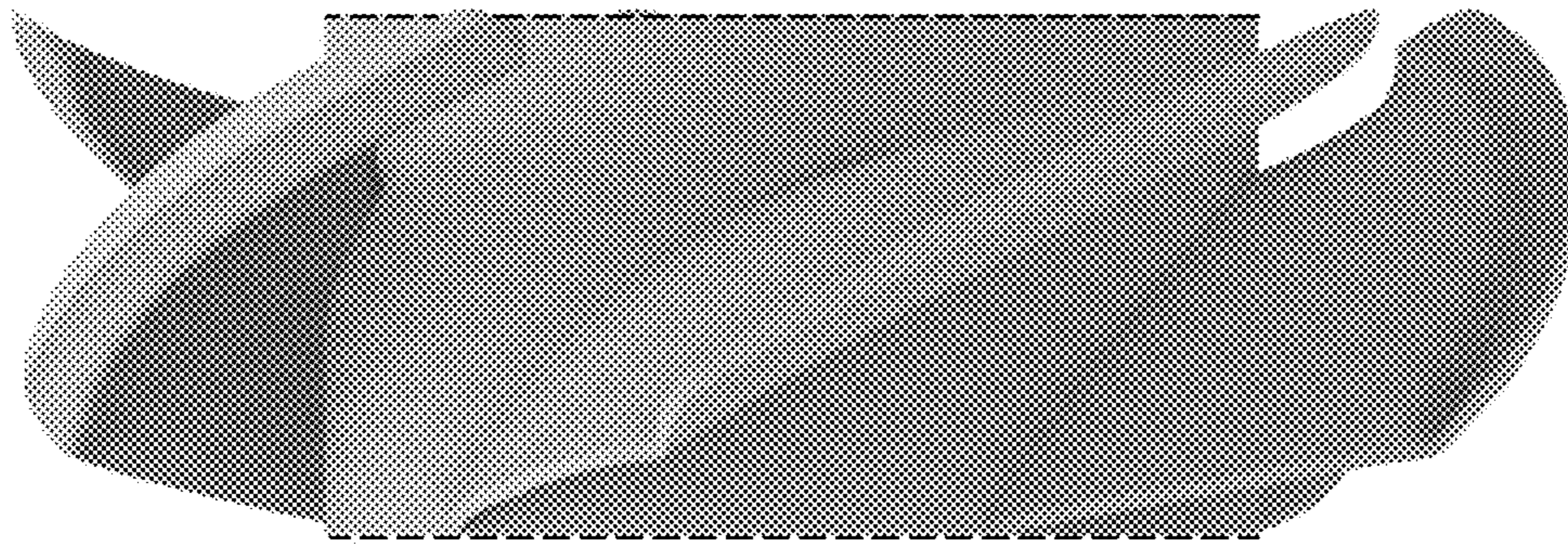


Fig. 20

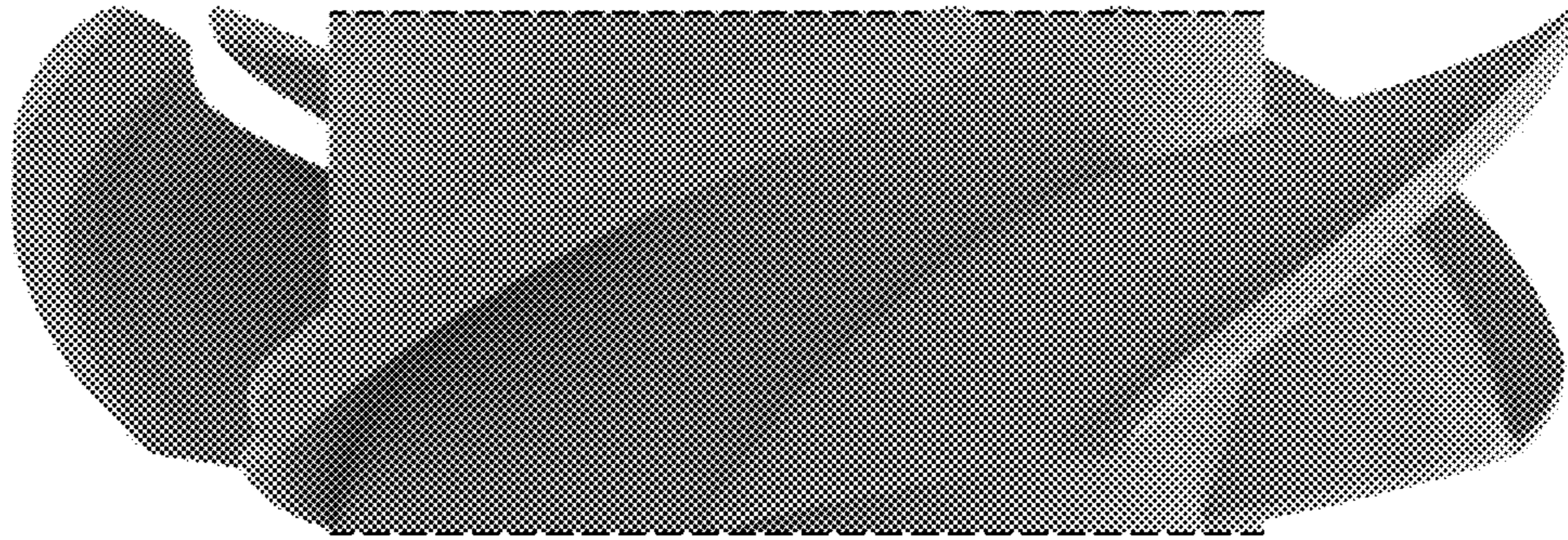


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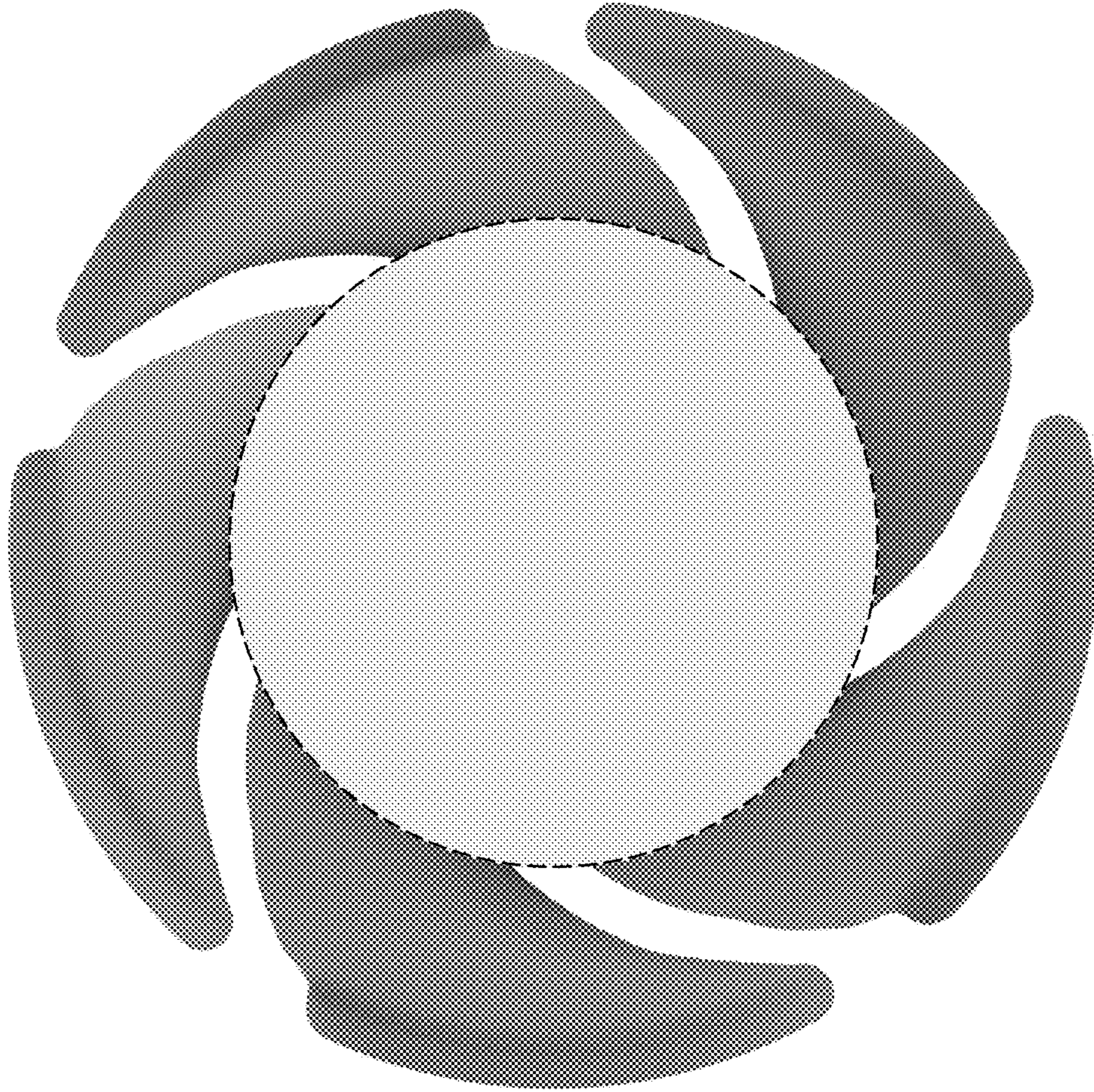


Fig. 22

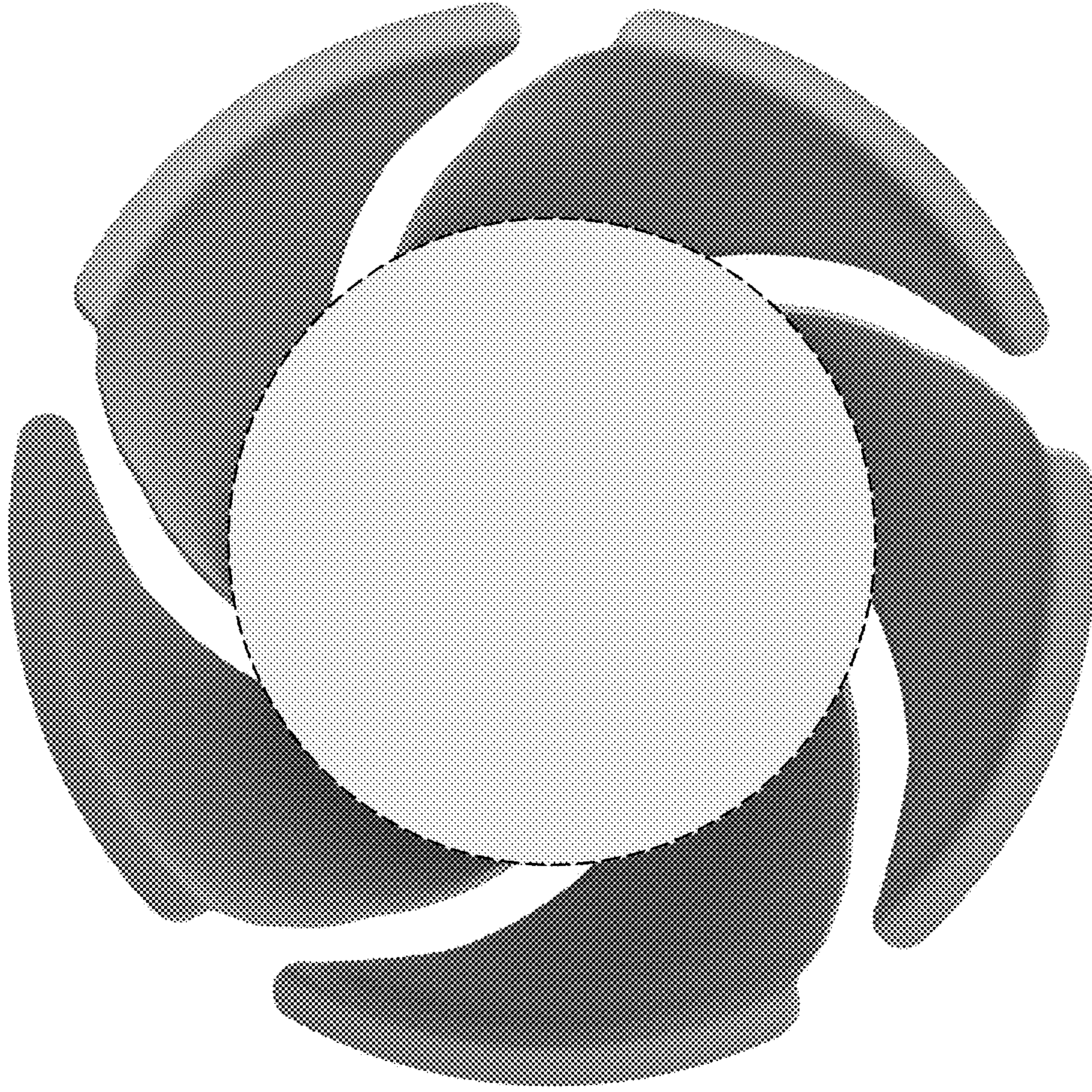


Fig. 23

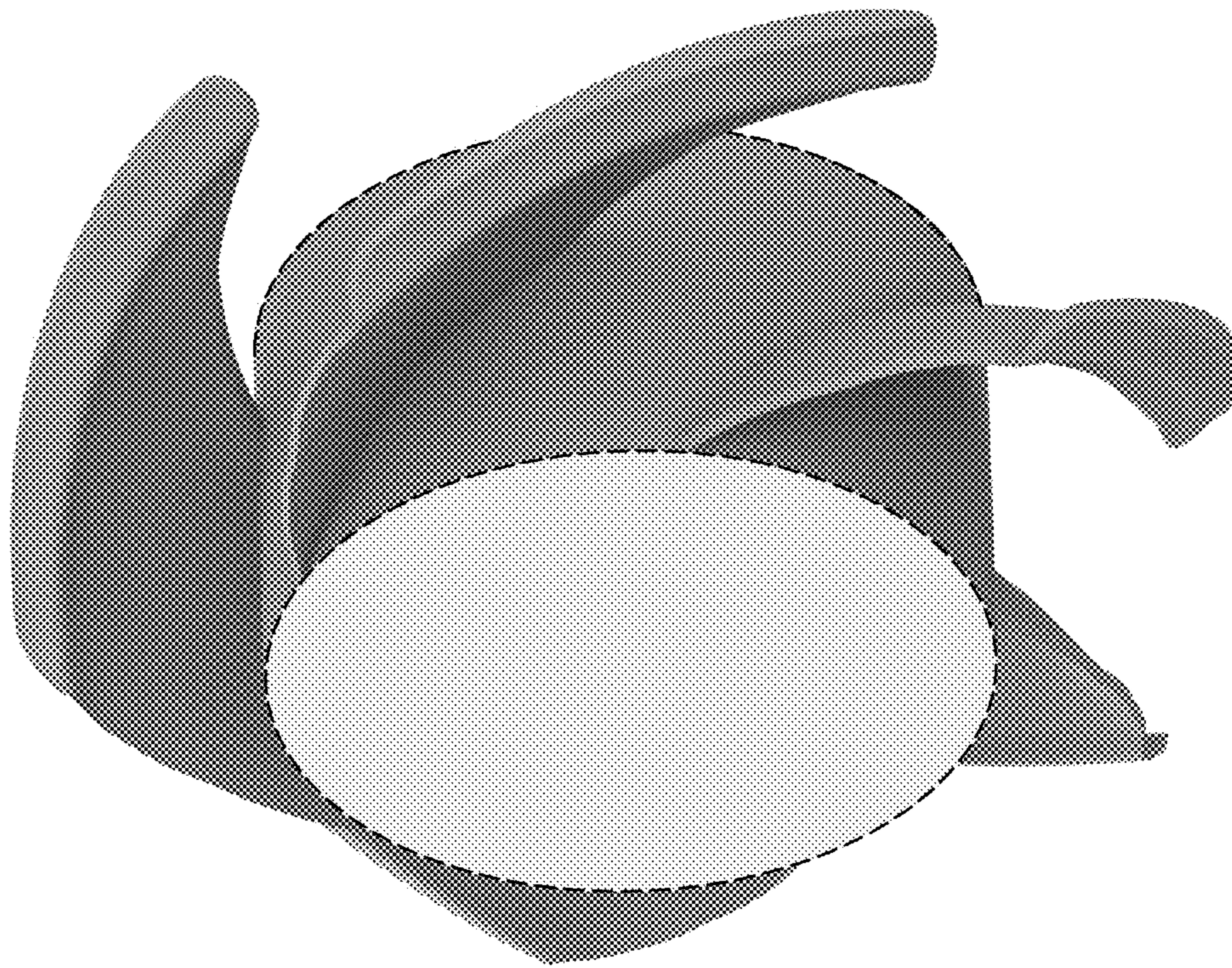


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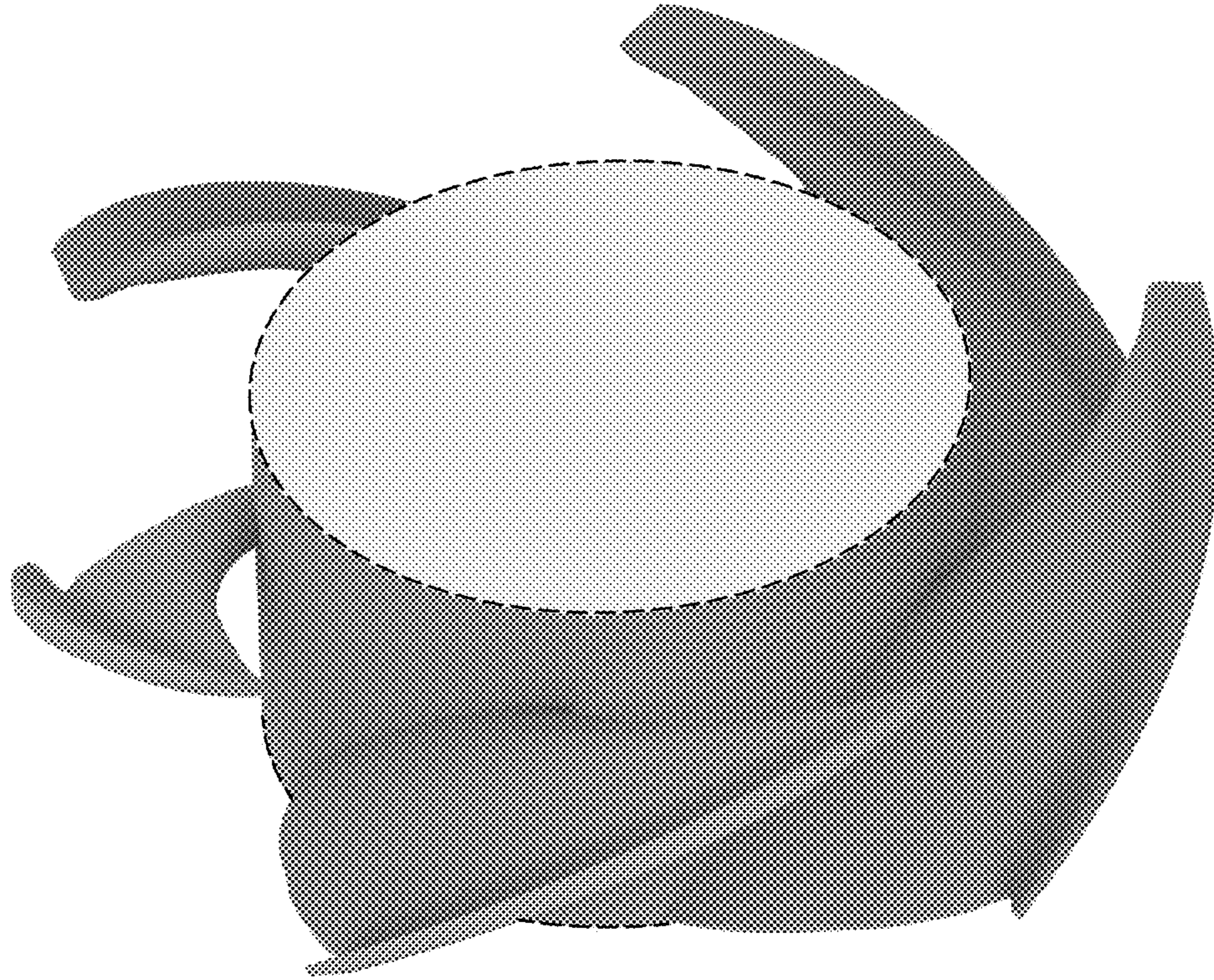


Fig. 25

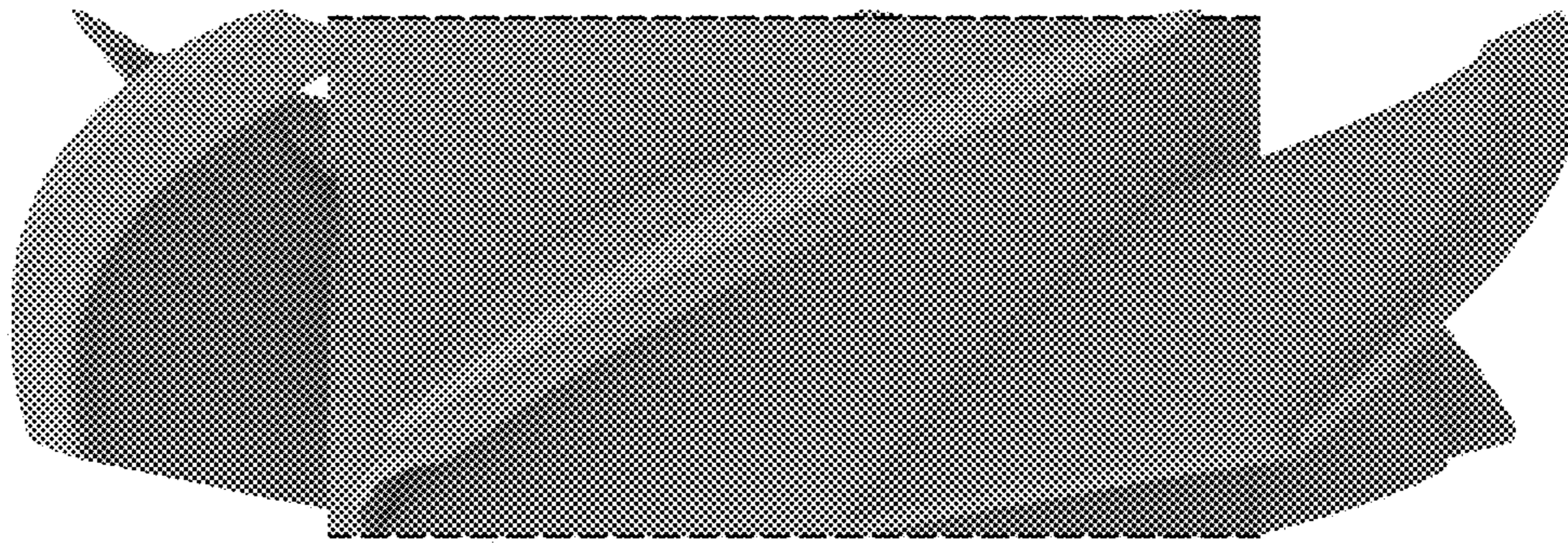


Fig. 26

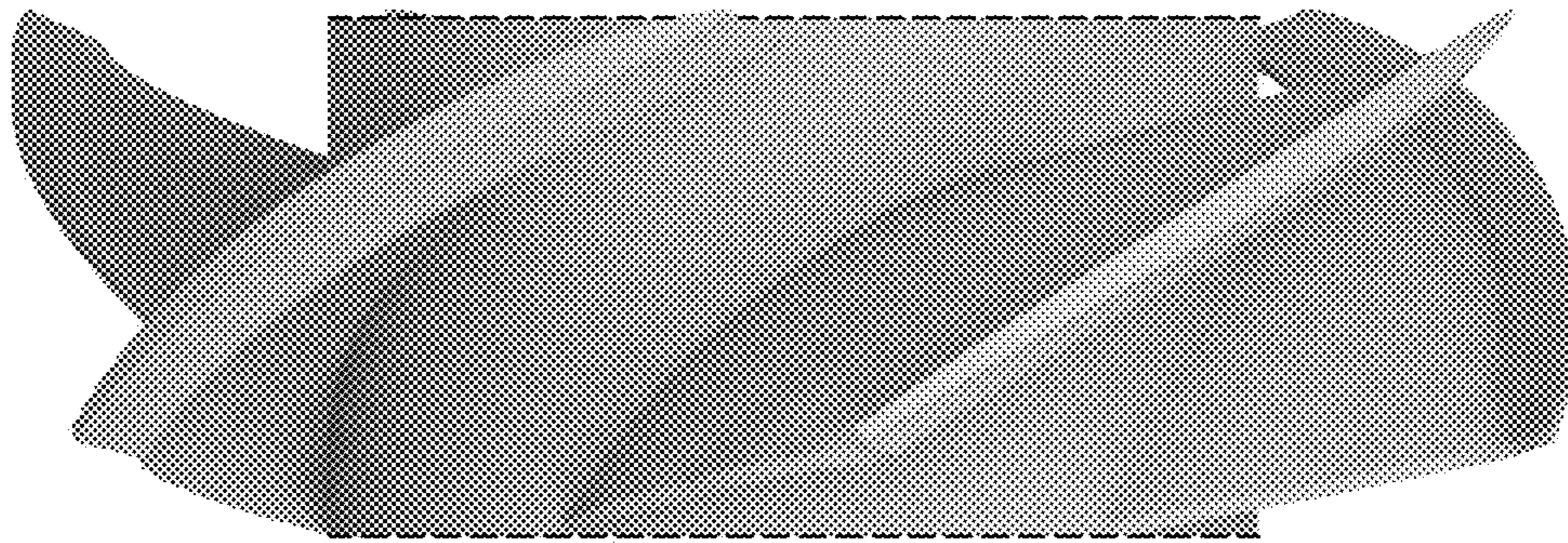


Fig. 27

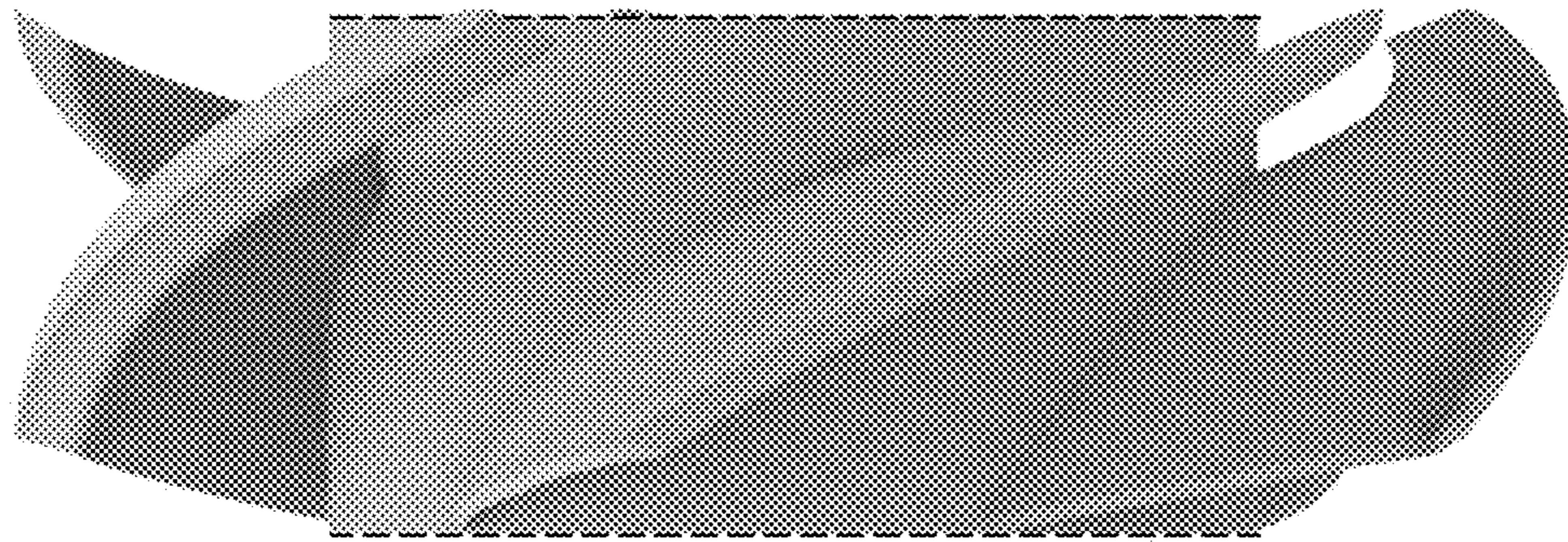


Fig. 28

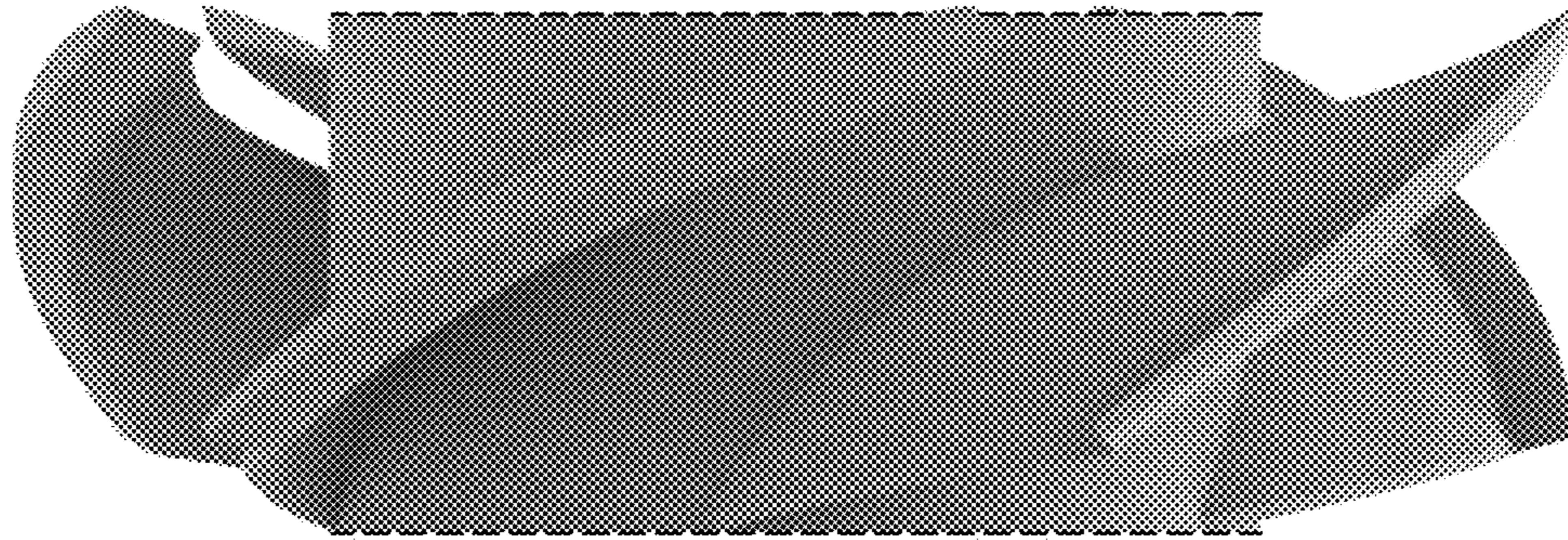


Fig. 29

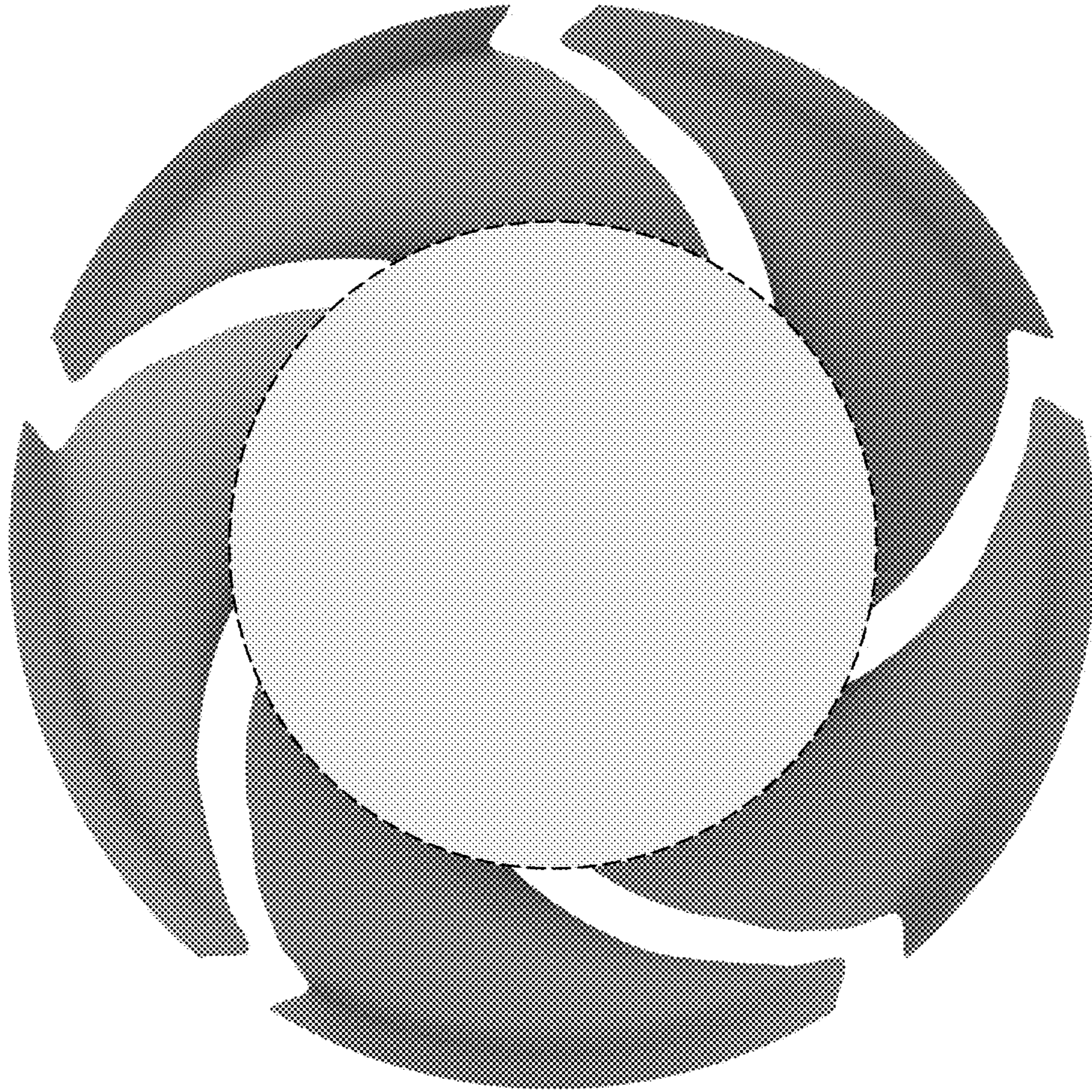


Fig. 30

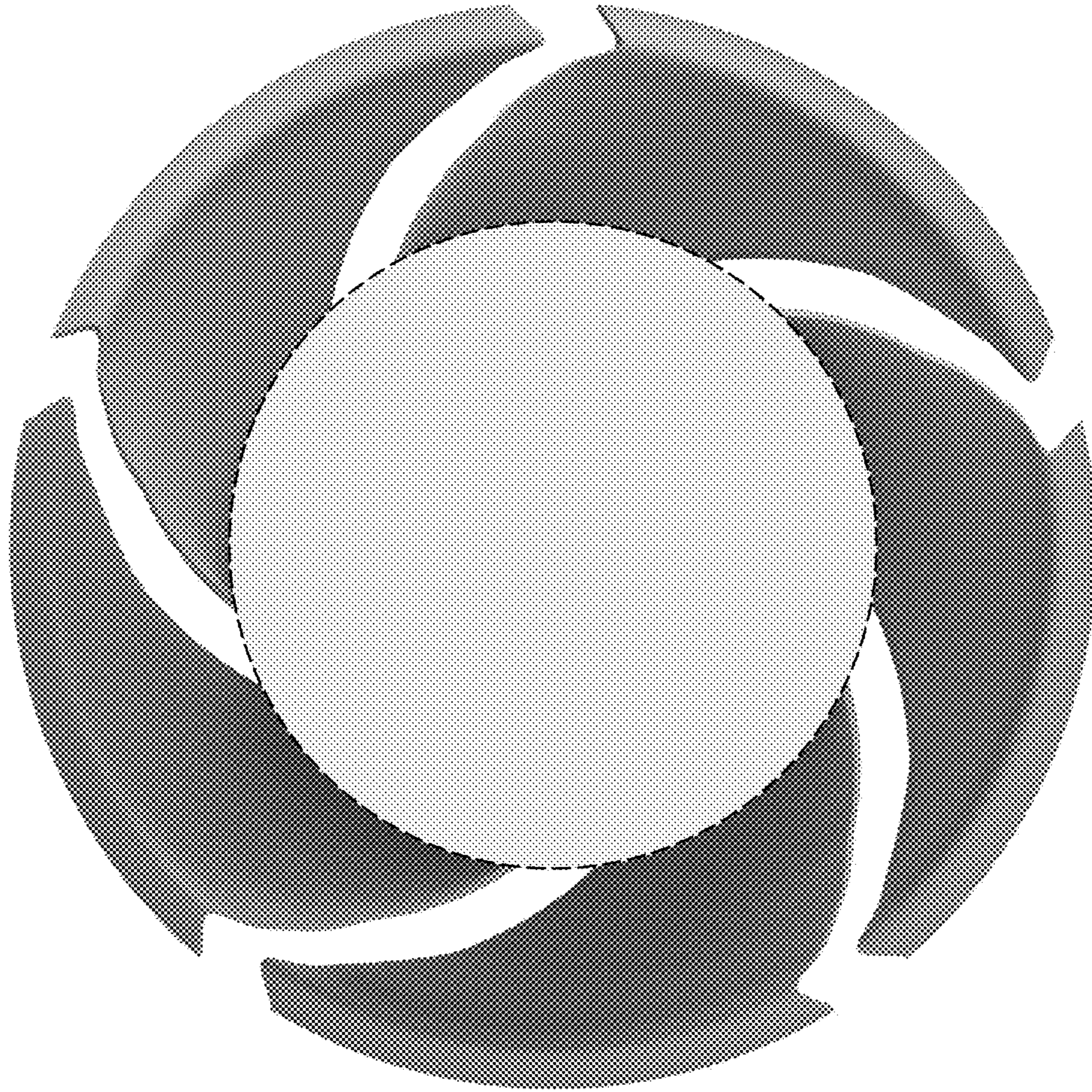


Fig. 31

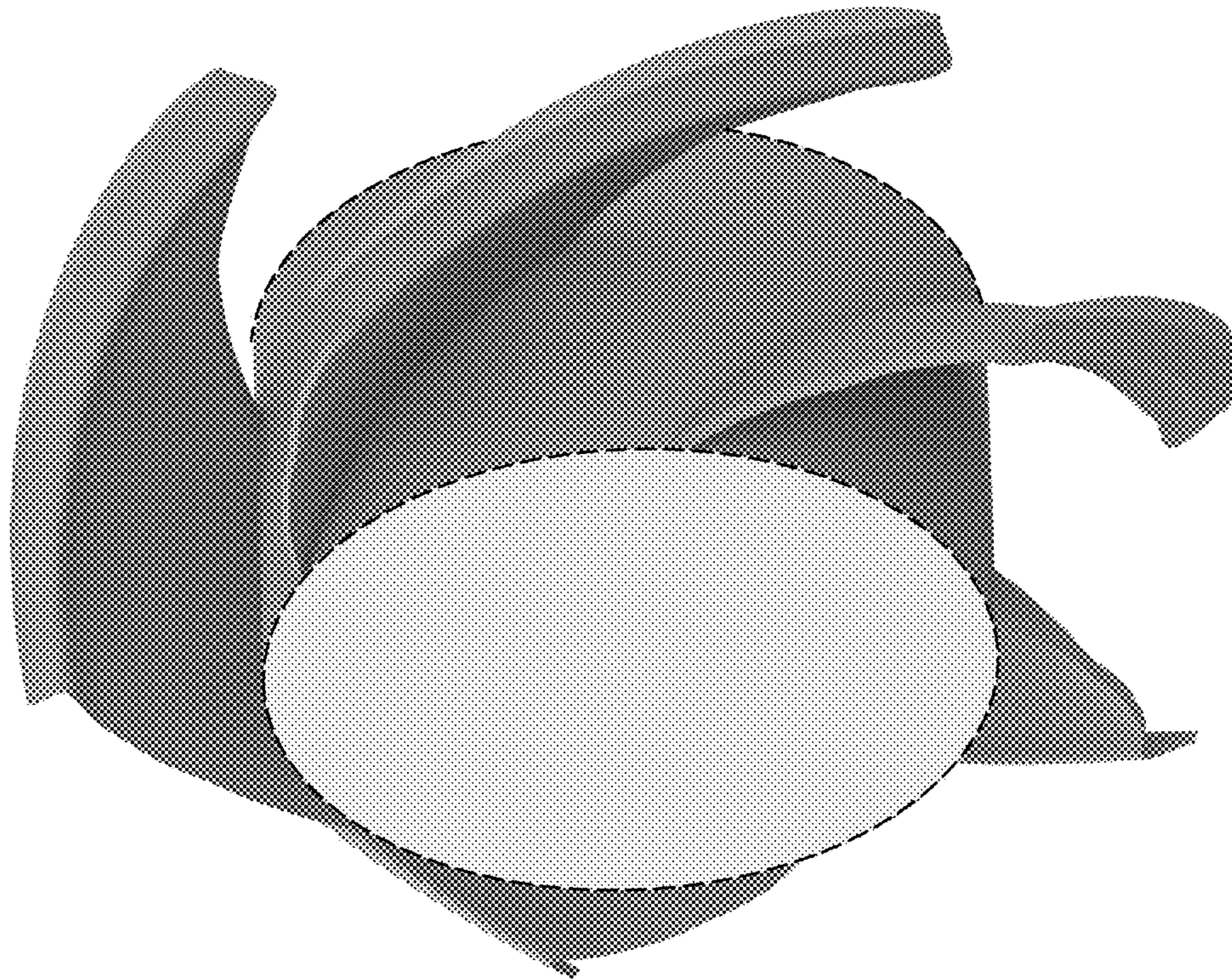


Fig. 32