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(12) **United States Design Patent** (10) **Patent No.:** **US D875,682 S**
Joutsiniemi (45) **Date of Patent:** **** Feb. 18, 2020**

(54) **ARCHED RIB FOR A TURBINE**
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(**) Term: **15 Years**
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(51) **LOC (12) Cl.** **13-01**
(52) **U.S. Cl.**
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CPC . Y02E 10/74; F03D 3/02; F03D 3/062; F03D 3/064; F03D 3/065; F05B 2280/6003; F05B 2230/20; F05B 2240/213; F01D 5/187
See application file for complete search history.

D671,070 S * 11/2012 Joutsiniemi D13/115
2006/0153682 A1 7/2006 Vanderhye et al.
2007/0086895 A1 4/2007 Vanderhye et al.
2008/0246284 A1 10/2008 Pelman et al.
(Continued)

FOREIGN PATENT DOCUMENTS

CA 1236030 5/1988
WO WO 81/01443 5/1981

OTHER PUBLICATIONS

International Search Report and Written Opinion for PCT Application PCT/US18/18635, dated Jun. 22, 2018, 11 pgs.
(Continued)

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(57) **CLAIM**

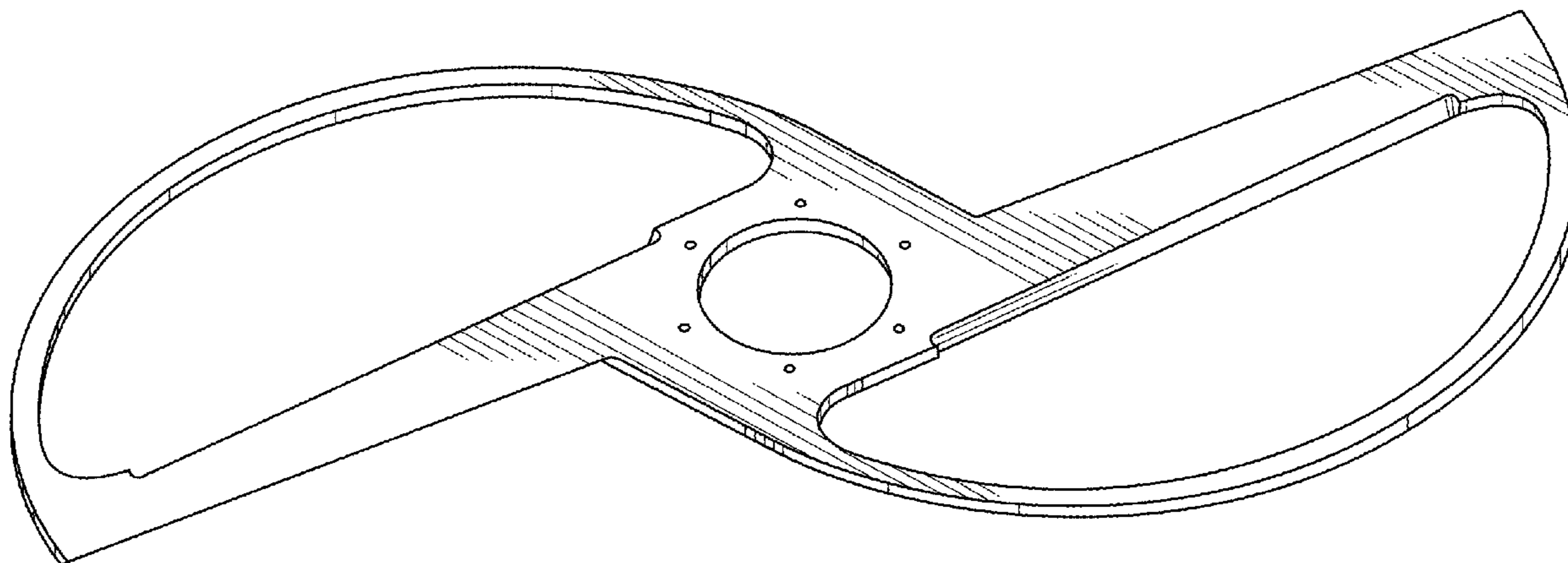
The ornamental design for an arched rib for a turbine, as shown.

DESCRIPTION

FIG. 1 is a top perspective view of an arched rib for a turbine.
FIG. 2 is a top plan view of the arched rib for a turbine depicted in FIG. 1.
FIG. 3 is a front side elevational view of the arched rib for a turbine depicted in FIG. 1.
FIG. 4 is a bottom plan view of the arched rib for a turbine depicted in FIG. 1.
FIG. 5 is a rear side elevational view of the arched rib for a turbine depicted in FIG. 1.
FIG. 6 is a left side elevational view of the arched rib for a turbine depicted in FIG. 1; and,
FIG. 7 is a right side elevational view of the arched rib for a turbine depicted in FIG. 1.

1 Claim, 4 Drawing Sheets

(56) **References Cited**
U.S. PATENT DOCUMENTS
1,200,308 A * 10/1916 Bunnell F04D 29/444
415/211.1
4,293,274 A 10/1981 Gilman
4,715,776 A 12/1987 Benesh
D440,103 S * 4/2001 Throne D6/580
6,345,957 B1 * 2/2002 Szpur F03D 3/065
416/197 A
6,966,747 B2 11/2005 Taylor et al.
D597,028 S * 7/2009 Sauer D13/115
7,762,777 B2 7/2010 Vanderhye et al.
D637,555 S * 5/2011 Rodriguez D13/115
8,087,897 B2 1/2012 Joutsiniemi



(56)

References Cited

U.S. PATENT DOCUMENTS

2009/0196750 A1 8/2009 Joutsiniemi
2011/0206526 A1* 8/2011 Roberts F03D 3/02
416/223 R
2012/0301301 A1 11/2012 Sauer
2014/0321989 A1 10/2014 Chambers et al.
2019/0257285 A1 8/2019 Joutsiniemi

OTHER PUBLICATIONS

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Feb. 19, 2019, inventor Joutsiniemi.

* cited by examiner

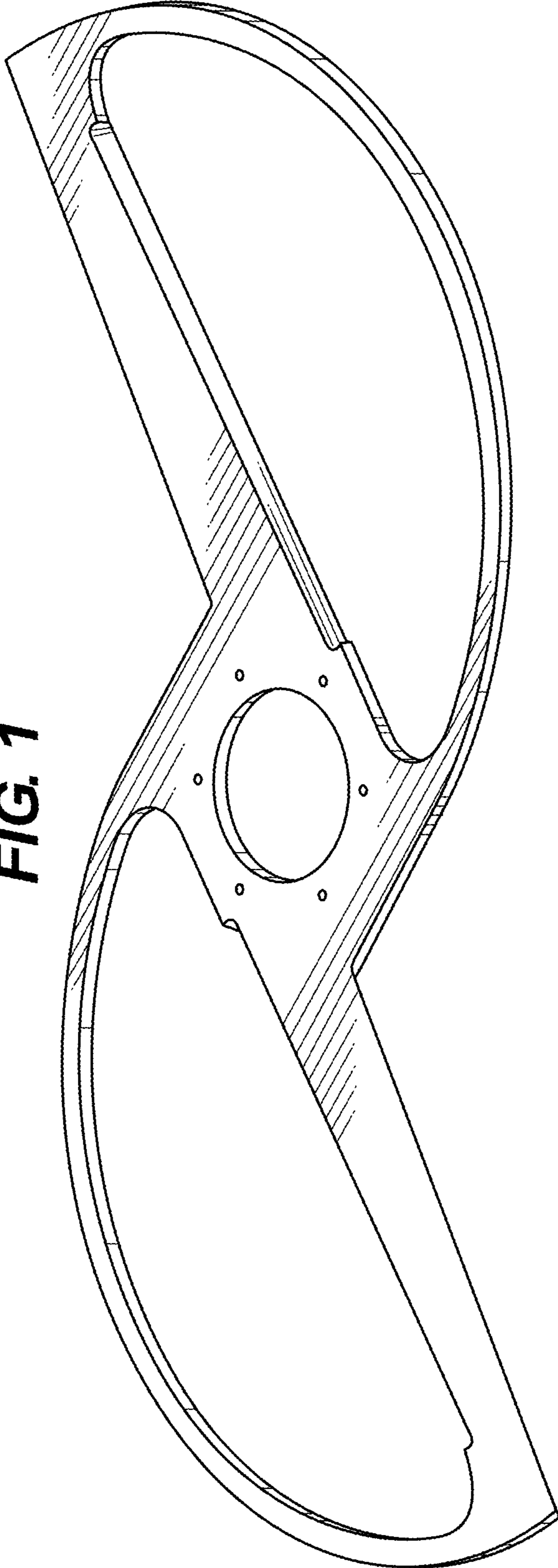


FIG. 1

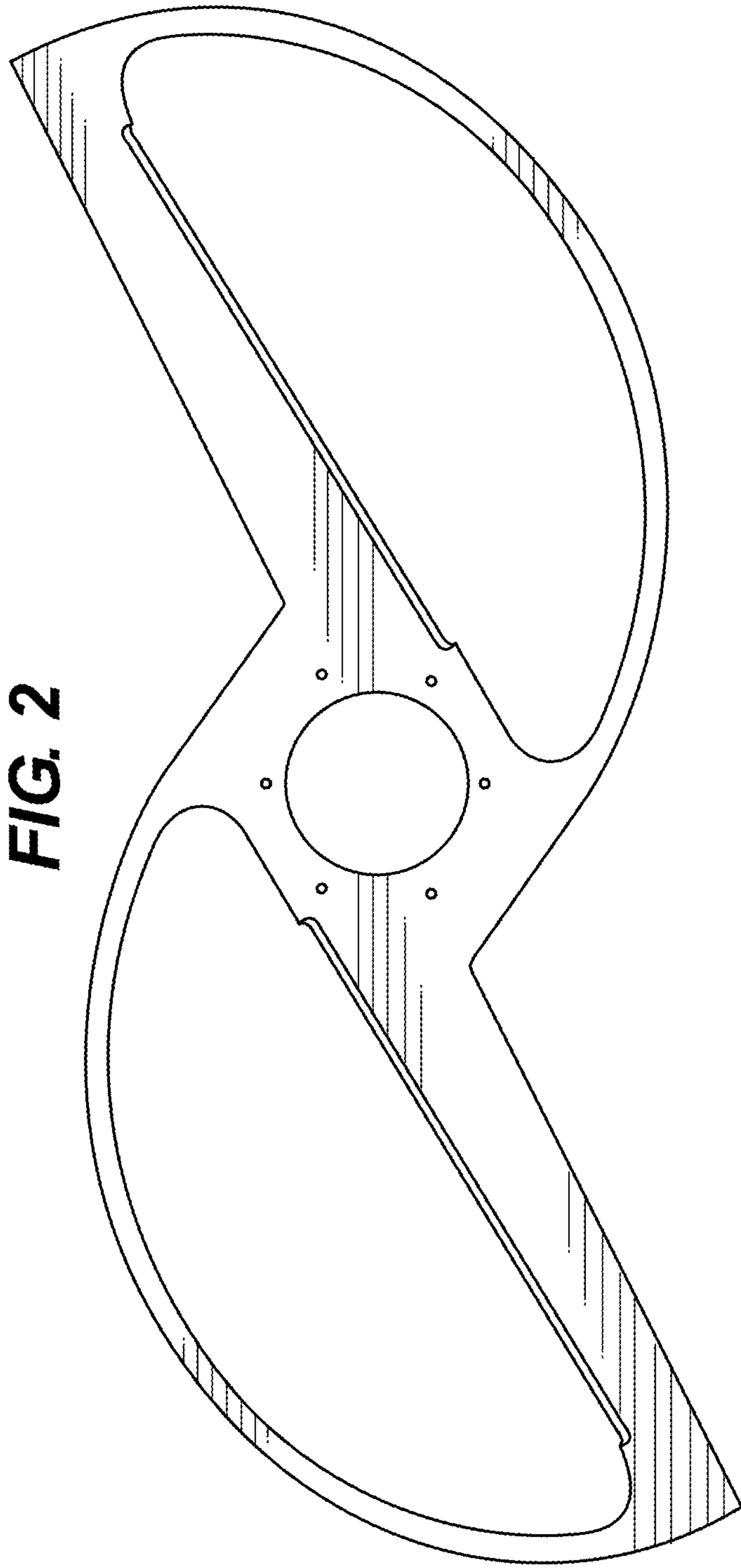


FIG. 2



FIG. 3

FIG. 4

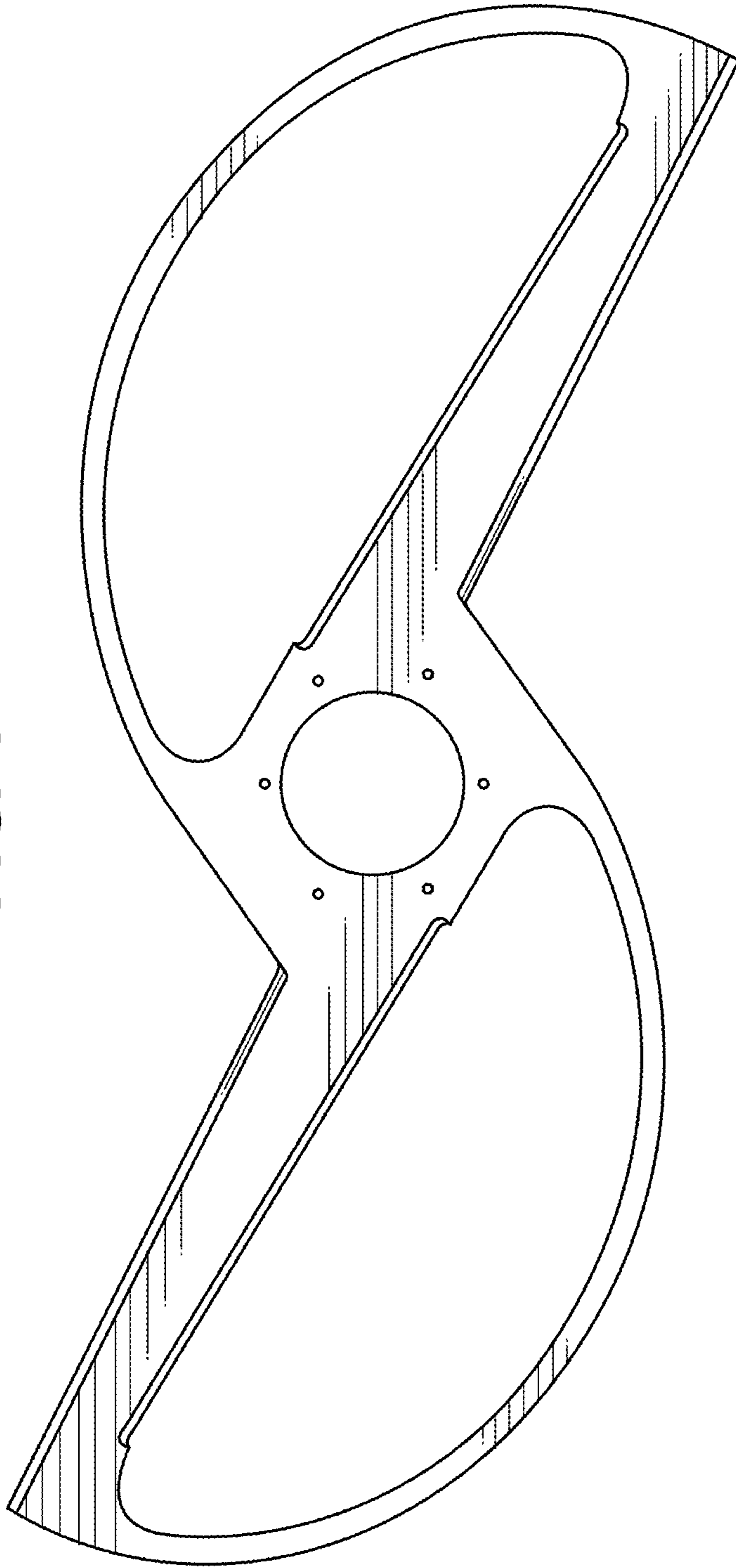


FIG. 5



FIG. 7



FIG. 6

