

US00D734845S

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

(10) **Patent No.:** **US D734,845 S**
(45) **Date of Patent:** **** Jul. 21, 2015**

(54) **COOLING FAN**

(56) **References Cited**

(71) Applicant: **Cooler Master Co., Ltd.**, New Taipei (TW)

U.S. PATENT DOCUMENTS

(72) Inventors: **Shi-Man Xu**, Hui Zhou (CN); **Jia-Sheng Lai**, Hui Zhou (CN); **Wen-Chun Hsu**, New Taipei (TW)

277,535	A *	5/1883	Baker	416/223 R
D173,436	S *	11/1954	Kline et al.	D23/414
3,597,111	A *	8/1971	Salisbury et al.	416/206
D257,364	S *	10/1980	Molenaar	D21/458
4,358,245	A *	11/1982	Gray	416/189
D281,616	S *	12/1985	McGuire	D21/457
4,684,324	A *	8/1987	Perosino	416/189
4,692,098	A *	9/1987	Razinsky et al.	416/223 R
4,768,472	A *	9/1988	Hayashi et al.	123/41.49
5,582,507	A *	12/1996	Alizadeh	416/189
D392,239	S *	3/1998	Cullen	D12/211
5,730,583	A *	3/1998	Alizadeh	416/189
5,769,607	A *	6/1998	Neely et al.	416/189
6,241,474	B1 *	6/2001	Alizadeh et al.	416/189
D446,295	S *	8/2001	Williams et al.	D23/370
6,368,061	B1 *	4/2002	Capdevila	416/169 A
6,554,574	B1 *	4/2003	Spaggiari	416/203
6,558,123	B1 *	5/2003	Spaggiari	416/238
6,579,063	B2 *	6/2003	Stairs et al.	416/169 A
D511,824	S *	11/2005	Chen et al.	D23/370
D513,530	S *	1/2006	Chen et al.	D23/379

(73) Assignee: **COOLER MASTER CO., LTD.**, New Taipei (TW)

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

(21) Appl. No.: **29/483,115**

(22) Filed: **Feb. 25, 2014**

(30) **Foreign Application Priority Data**

Oct. 9, 2013 (TW) 102306667

(51) **LOC (10) Cl.** **23-04**

(52) **U.S. Cl.**
USPC **D23/414**; D23/370; D23/411

(58) **Field of Classification Search**
USPC D23/370-379, 380, 381-385, 411-414, D23/324, 330, 332, 335, 353-369, 499; D21/455, 458; 392/365, 367; 415/179, 415/182.1; 416/62, 93 R, 100, 182, 189, 416/244 R, 246, 247 R, 223 R; 417/200, 417/423.1; 123/41.49; 261/24, 28; 361/695, 361/697; D13/175, 179; D12/214
CPC F04D 29/326; F04D 29/38; F04D 29/382; F04D 29/384; F04D 29/386; F04D 29/388; F04D 29/281; F04D 29/282; F04D 29/28; F04D 29/329; F04D 29/663

See application file for complete search history.

(Continued)

Primary Examiner — Susan Bennett Hattan

Assistant Examiner — Marie Fast Horse

(74) *Attorney, Agent, or Firm* — Chun-Ming Shih; HDLS IPR Services

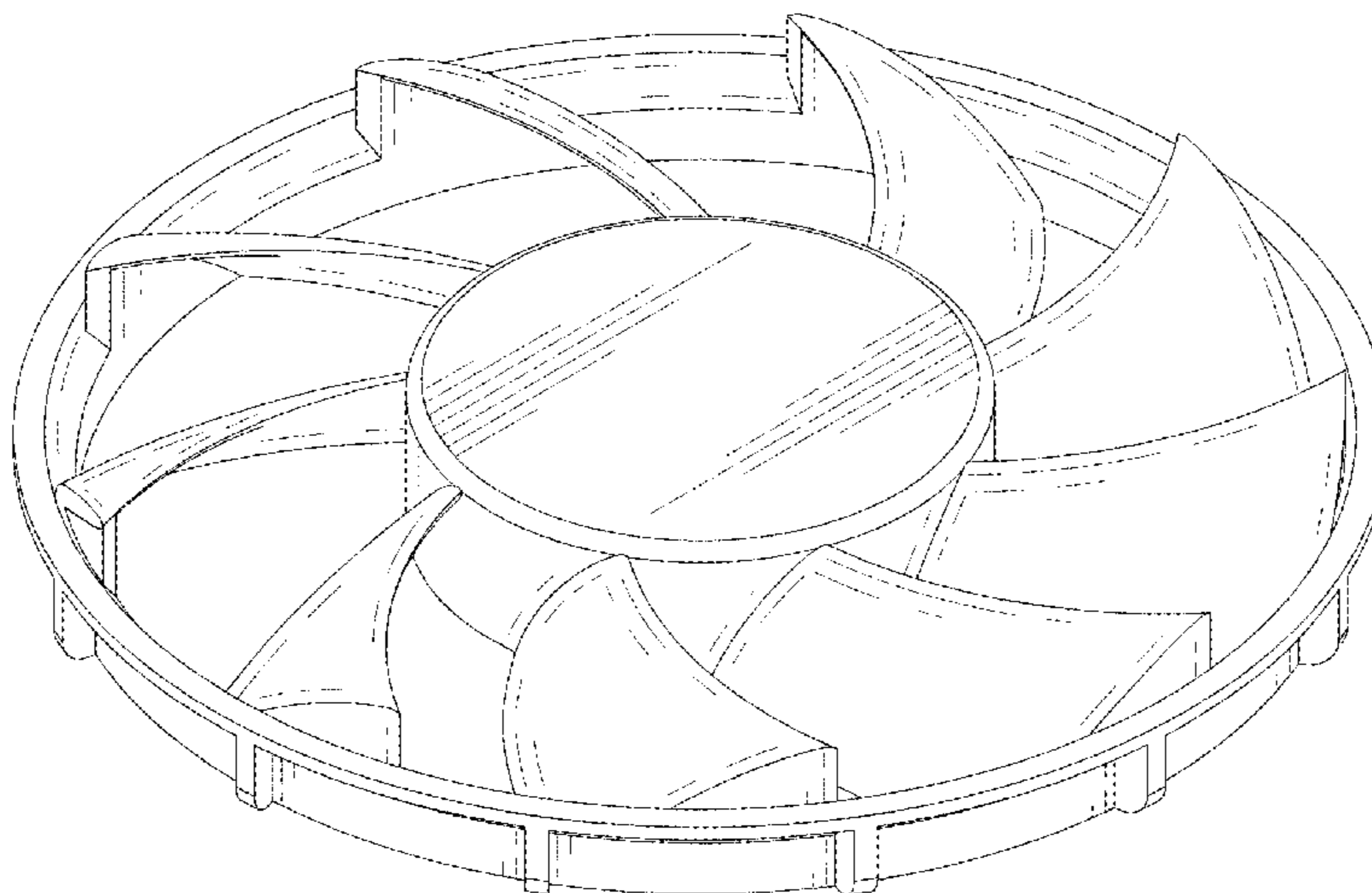
(57) **CLAIM**

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

DESCRIPTION

FIG. 1 is a perspective view of a cooling fan showing my new design;
FIG. 2 is a front view thereof;
FIG. 3 is a rear view thereof;
FIG. 4 is a left side view thereof;
FIG. 5 is a right side view thereof;
FIG. 6 is a top view thereof; and,
FIG. 7 is a bottom view thereof.
The broken lines in FIG. 7 depict parts of the cooling fan that form no part of the claimed design.

1 Claim, 5 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D565,166	S *	3/2008	Calkins	.....	D23/370	2007/0104581	A1 *	5/2007	Stagg et al.	.....	416/189
7,455,502	B2 *	11/2008	Spaggiari	.....	416/93 R	2007/0166165	A1 *	7/2007	Lee	.....	416/189
7,654,793	B2 *	2/2010	Savage	.....	415/208.2	2007/0166166	A1 *	7/2007	Lee	.....	416/189
D645,134	S *	9/2011	Lee et al.	.....	D23/411	2008/0044292	A1 *	2/2008	Spaggiari	.....	416/243
D663,411	S *	7/2012	Naya et al.	.....	D23/411	2008/0156282	A1 *	7/2008	Aschermann	.....	123/41.49
D670,803	S *	11/2012	Spaggiari	.....	D23/413	2008/0210409	A1 *	9/2008	Saksager	.....	165/104.33
8,317,478	B2 *	11/2012	Higo et al.	.....	416/193 R	2009/0155076	A1 *	6/2009	Jarrah	.....	416/182
D681,187	S *	4/2013	Hu et al.	.....	D23/413	2010/0068060	A1 *	3/2010	Ota et al.	.....	416/179
D681,188	S *	4/2013	Hu et al.	.....	D23/413	2010/0260630	A1 *	10/2010	Bilodeau et al.	.....	417/423.1
D681,800	S *	5/2013	Hu et al.	.....	D23/413	2011/0094460	A1 *	4/2011	Hoskins	.....	123/41.49
8,568,095	B2 *	10/2013	Bushnell	.....	415/228	2011/0135494	A1 *	6/2011	Nicgorski et al.	.....	416/93 R
D723,152	S *	2/2015	Xu et al.	.....	D23/370	2011/0223048	A1 *	9/2011	Cheng et al.	.....	417/423.1
D726,300	S *	4/2015	DeFilippis	.....	D23/414	2011/0236211	A1 *	9/2011	Schneider et al.	.....	416/144
2003/0012656	A1 *	1/2003	Cho et al.	.....	416/235	2012/0224988	A1 *	9/2012	Maier et al.	.....	417/423.1
2003/0124001	A1 *	7/2003	Chen	.....	417/356	2012/0244000	A1 *	9/2012	Turcas	.....	416/189
2004/0013526	A1 *	1/2004	Nilson	.....	416/189	2013/0028747	A1 *	1/2013	Henner et al.	.....	416/242
2004/0047734	A1 *	3/2004	Nilson	.....	416/189	2013/0147312	A1 *	6/2013	Qin et al.	.....	310/234
2004/0175270	A1 *	9/2004	Havel et al.	.....	416/189	2013/0266439	A1 *	10/2013	Rubak et al.	.....	415/208.1
2005/0180849	A1 *	8/2005	Chen et al.	.....	415/220	2013/0315737	A1 *	11/2013	Dygert et al.	.....	416/179
2005/0186077	A1 *	8/2005	Lee et al.	.....	416/179	2013/0323062	A1 *	12/2013	Henner et al.	.....	416/195
2005/0196282	A1 *	9/2005	Lee et al.	.....	416/179	2014/0030104	A1 *	1/2014	Lee et al.	.....	416/223 R
2005/0207894	A1 *	9/2005	Park et al.	.....	416/223 R	2014/0056710	A1 *	2/2014	Henner et al.	.....	416/189
2005/0238486	A1 *	10/2005	Stagg et al.	.....	415/179	2014/0119922	A1 *	5/2014	Nakano et al.	.....	416/189
						2014/0334952	A1 *	11/2014	Ziegler et al.	.....	417/423.1
						2015/0064011	A1 *	3/2015	Xu et al.	.....	416/189
						2015/0078937	A1 *	3/2015	Crevel et al.	.....	417/423.1

* cited by examiner

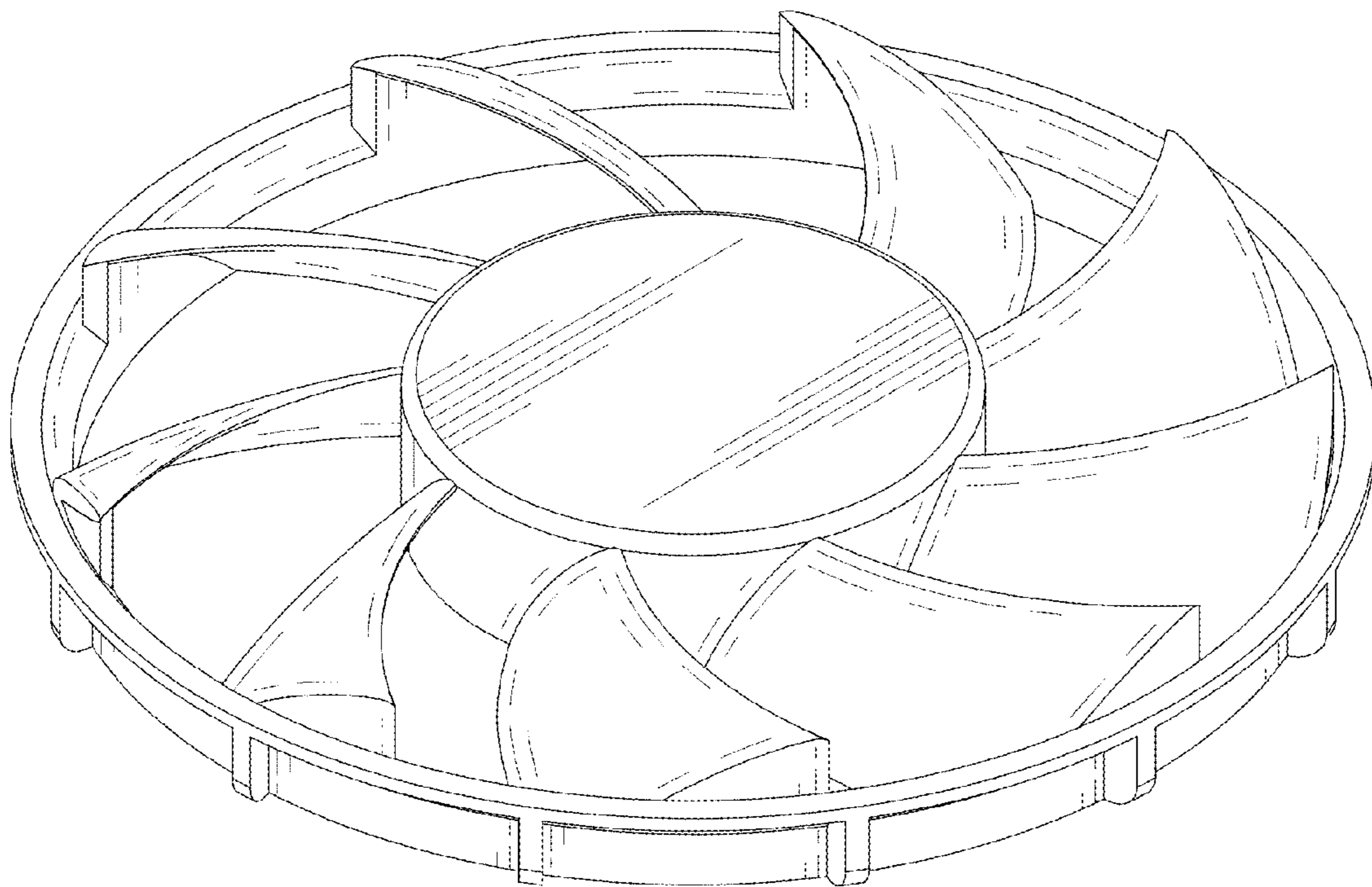


FIG.1

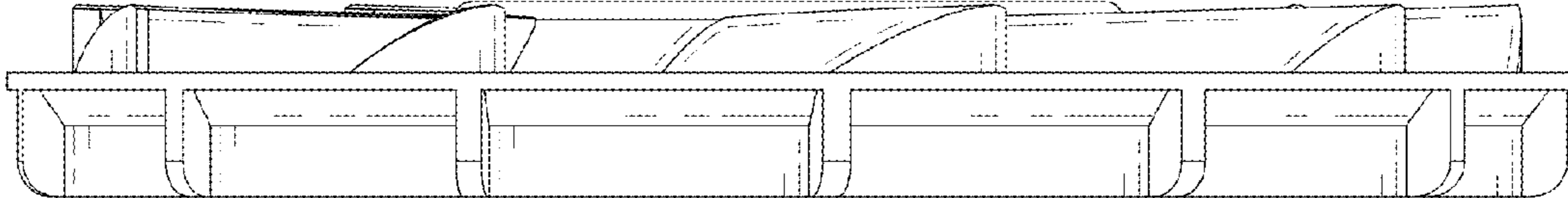


FIG. 2

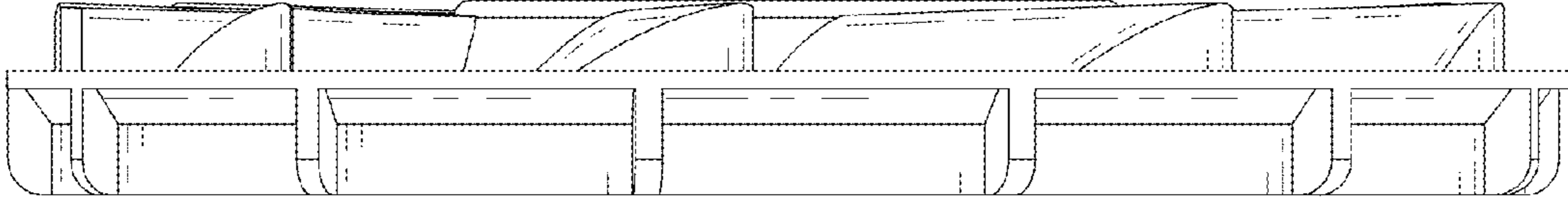


FIG. 3

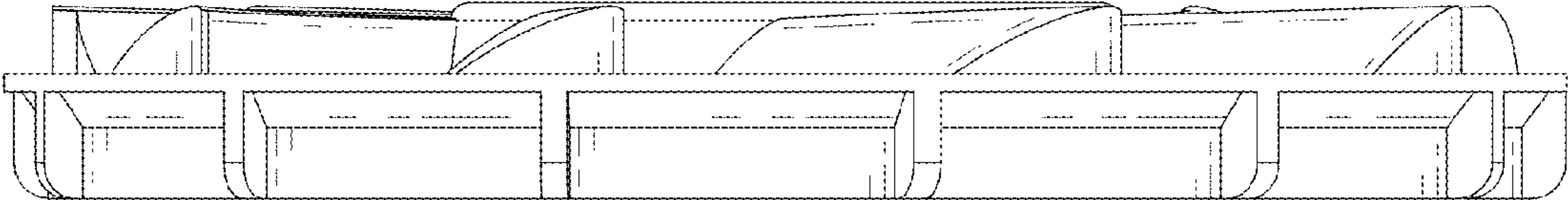


FIG. 4

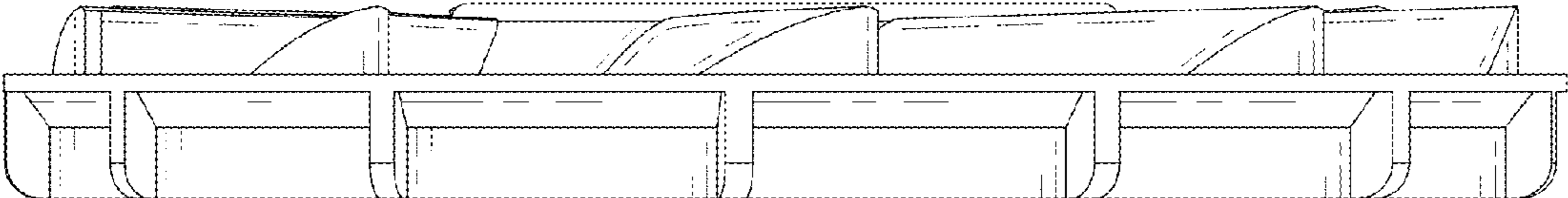


FIG. 5

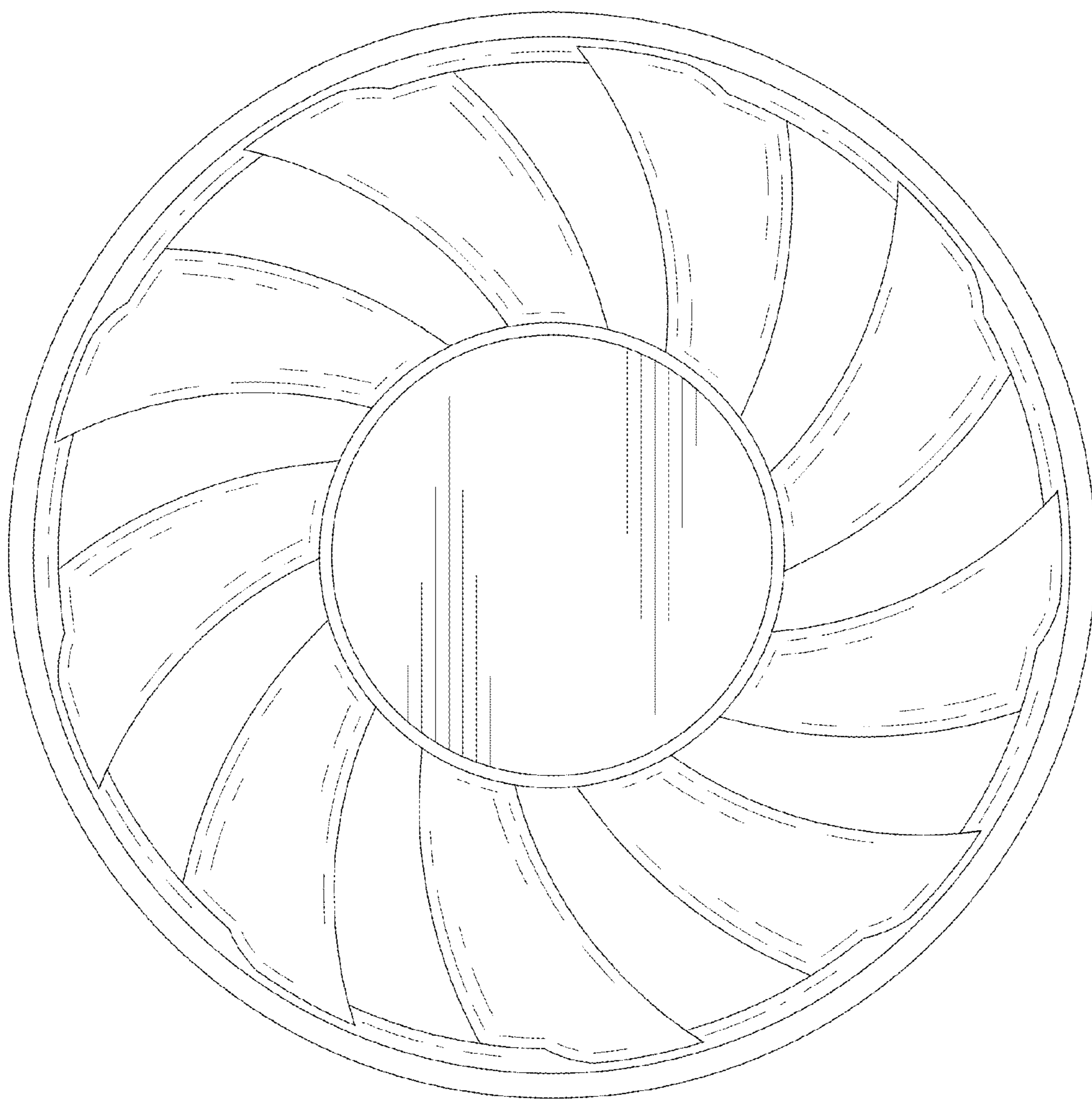


FIG.6

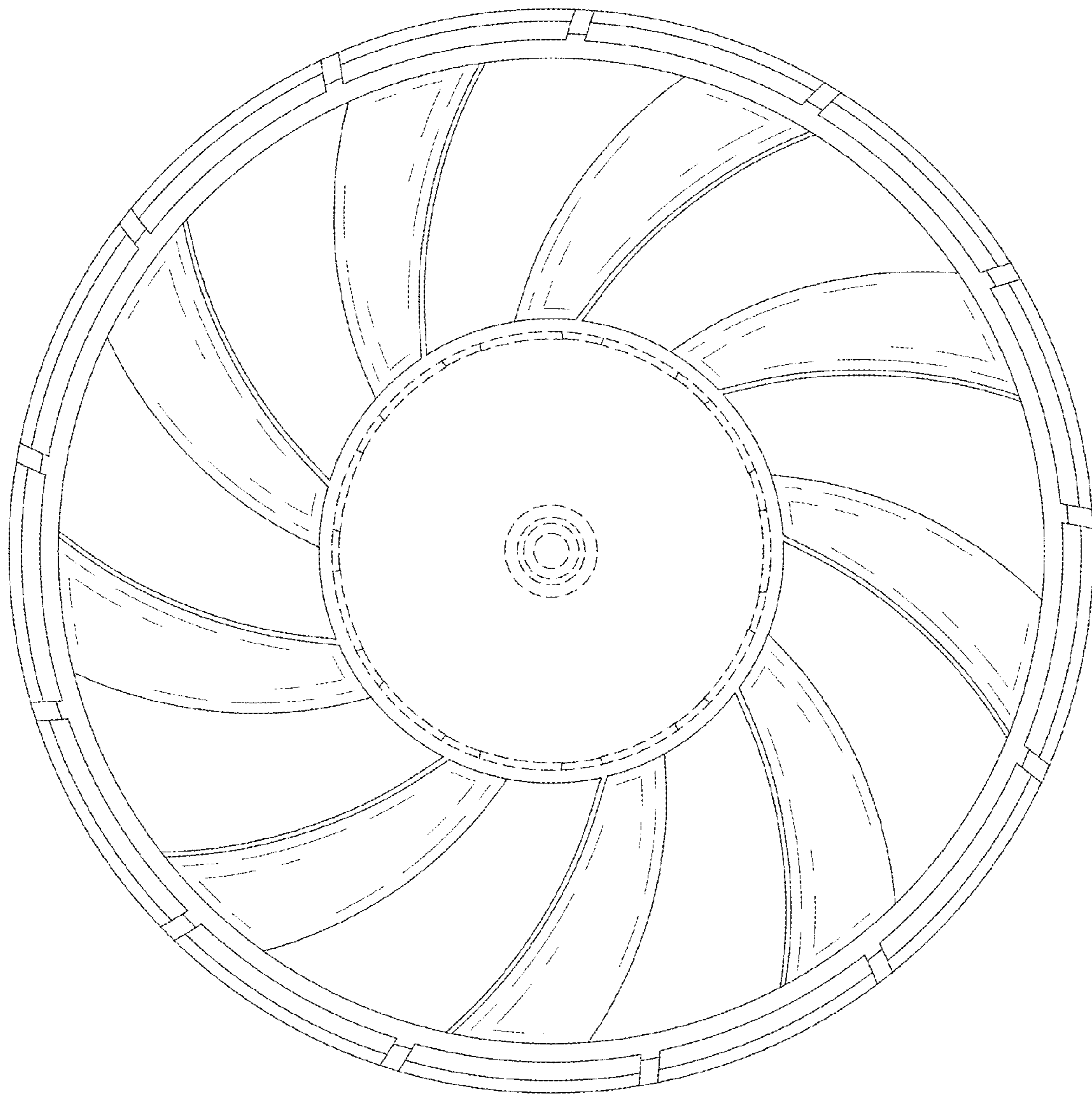


FIG.7