



US00D826629S

(12) **United States Design Patent** (10) **Patent No.:** **US D826,629 S**
Andersson et al. (45) **Date of Patent:** **** Aug. 28, 2018**

(54) **IMPELLER BLADE FOR AN AGITATOR OR A MIXER**

D557,401 S * 12/2007 Lee D23/413
D615,181 S * 5/2010 Lee D23/377
D706,581 S * 6/2014 Pendleton D7/376

(Continued)

(71) Applicant: **Sulzer Management AG**, Winterthur (CH)

(72) Inventors: **Mikael Andersson**, Göteborg (SE);
Erik Blechingberg, Göteborg (SE)

(73) Assignee: **SULZER MANAGEMENT AG**, Winterthur (CH)

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

(21) Appl. No.: **29/570,756**

(22) Filed: **Jul. 12, 2016**

(30) **Foreign Application Priority Data**

Feb. 5, 2016 (EM) 002974618

(51) **LOC (11) Cl.** **31-00**

(52) **U.S. Cl.**
USPC **D7/376; D7/378; D7/383**

(58) **Field of Classification Search**
USPC D7/371, 412, 679, 688, 694; D8/2;
D12/14, 214; D15/32, 130, 131;
D23/377, 413; D24/220; D34/3
CPC A47J 43/00; A47J 43/04; A47J 43/046
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D291,911 S * 9/1987 Fries D23/207
D316,700 S * 5/1991 Morrison D12/214
D335,274 S * 5/1993 Beckerer, Jr. D12/215
D353,572 S * 12/1994 Schlangen D12/214
D436,647 S * 1/2001 Etschel D23/200
D456,502 S * 4/2002 Small D23/413
D456,894 S * 5/2002 Small D23/413
D510,998 S * 10/2005 Parker D23/411
D556,893 S * 12/2007 Lee D23/413
D556,894 S * 12/2007 Lee D23/413

OTHER PUBLICATIONS

Stir-Pak 316 Stainless Steel three-blade propeller, posted on coleparmer.com, earliest Q&A posted on May 15, 2010, no production date given, [online], [site visited Aug. 3, 2017], Available from Internet, <URL: https://www.coleparmer.com/i/stir-pak-316-stainless-steel-three-blade-propeller-3-dia-x-5-16-bore-dia/0455260?PubID=UX&persist=true&ip=no&gc.*>

(Continued)

Primary Examiner — Melanie H Tung
Assistant Examiner — Fritzgerald L Butac
(74) *Attorney, Agent, or Firm* — Global IP Counselors, LLP

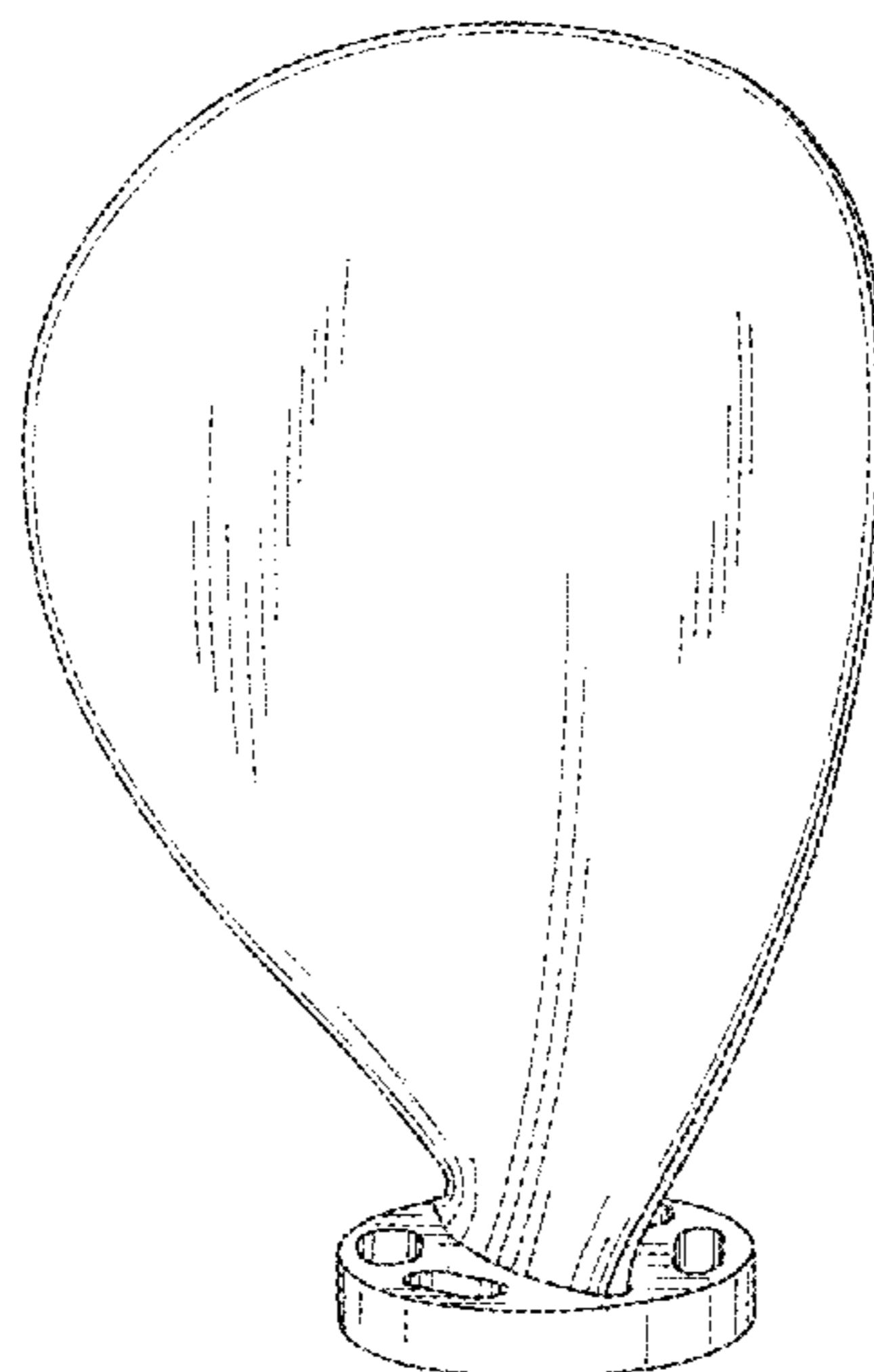
(57) **CLAIM**

The ornamental design for an impeller blade for an agitator or a mixer, as shown and described.

DESCRIPTION

FIG. 1 is a top perspective view of the impeller blade in accordance with our new design;
FIG. 2 is a front view of the impeller blade in accordance with our new design of FIG. 1;
FIG. 3 is a rear view of the impeller blade in accordance with our new design of FIGS. 1 and 2;
FIG. 4 is a top view of the impeller blade in accordance with our new design of FIGS. 1 to 3;
FIG. 5 is a bottom view of the impeller blade in accordance with our new design of FIGS. 1 to 4;
FIG. 6 is a left elevational view of the impeller blade in accordance with our new design of FIGS. 1 to 5; and,
FIG. 7 is a right elevational view of the impeller blade in accordance with our new design of FIGS. 1 to 6.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D706,705 S * 6/2014 Long D12/345
 D715,421 S * 10/2014 Schulzman D23/413
 D721,800 S * 1/2015 Busta D23/413
 D723,997 S * 3/2015 Foreman D12/214
 D725,251 S * 3/2015 Hamada D12/214
 D741,468 S * 10/2015 Ertze D23/377
 D743,530 S * 11/2015 Pan D23/413
 9,174,180 B2 11/2015 Juha
 D755,703 S * 5/2016 Hanscom D12/16.1
 D761,184 S * 7/2016 Xiao D12/214
 D772,393 S * 11/2016 Wang D23/377
 D776,251 S * 1/2017 Pickett D23/413
 D780,902 S * 3/2017 Gajewski D23/377
 D783,146 S * 4/2017 Wang D23/413
 D785,157 S * 4/2017 Wang D23/377
 D789,508 S * 6/2017 Wang D23/377
 D789,509 S * 6/2017 Wang D23/377
 D789,510 S * 6/2017 Wang D23/377
 D790,430 S * 6/2017 Ali D12/214
 D792,318 S * 7/2017 Du D12/214
 2015/0201809 A1 * 7/2015 Balasubramanian ... A47J 43/06
 241/65

OTHER PUBLICATIONS

Sunkaier Agitater impeller / 3-blade / axial-flow, posted on directindustry.com, no posted date given, no production date given, [online], [site visited Aug. 3, 2017], Available from Internet, <URL: <http://www.directindustry.com/prod/sunkaier-industrial-technology-co-ltd/product-132671-1567022.html>>.*
 Lightnin 800578 Two-Blade Folding Impeller, posted on coleparmer.com, no posted date given, no production date given, [online], [site visited Aug. 3, 2017], Available from Internet, <URL: <https://www.coleparmer.com/i/lightnin-800578-two-blade-folding-impeller-5-16-bore-2-dia/0454300>>.*
 Axial Fan Blade, posted on ecvv.com, posted Jul. 9, 2012, no production date posted, [online], [site visited Aug. 3, 2017], Available from Internet, <URL: <http://www.ecvv.com/product/3188440.html>>.*
 Sulzer. "Salomix and Scaba Side-Mounted Agitators". Oct. 2014. 8 Pages.
 Sulzer. "The World Leader in Pumping and Mixing Solutions for the Pulp and Paper Industry". Apr. 2016. 24 Pages.

* cited by examiner

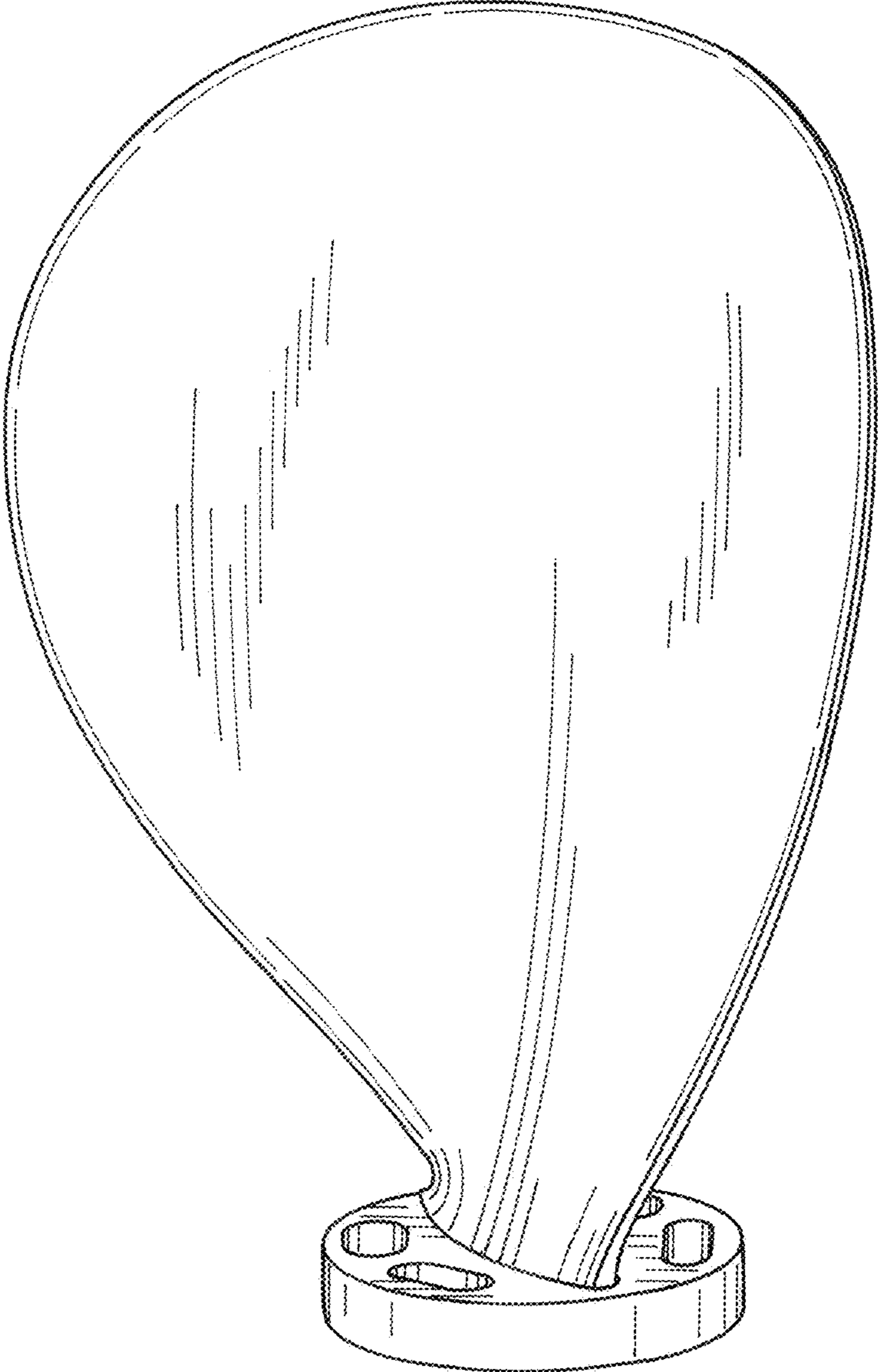


Fig.1

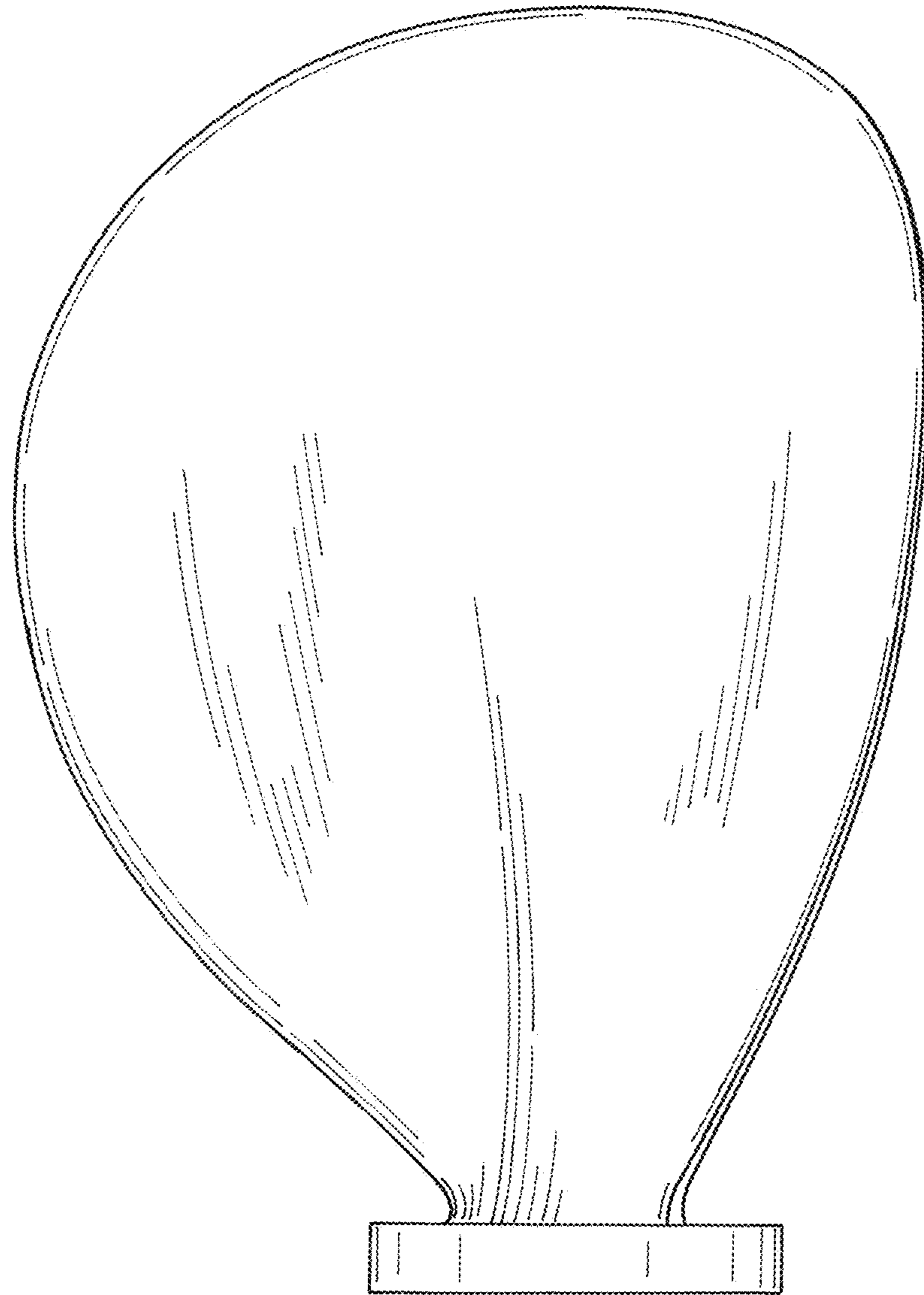


Fig. 2

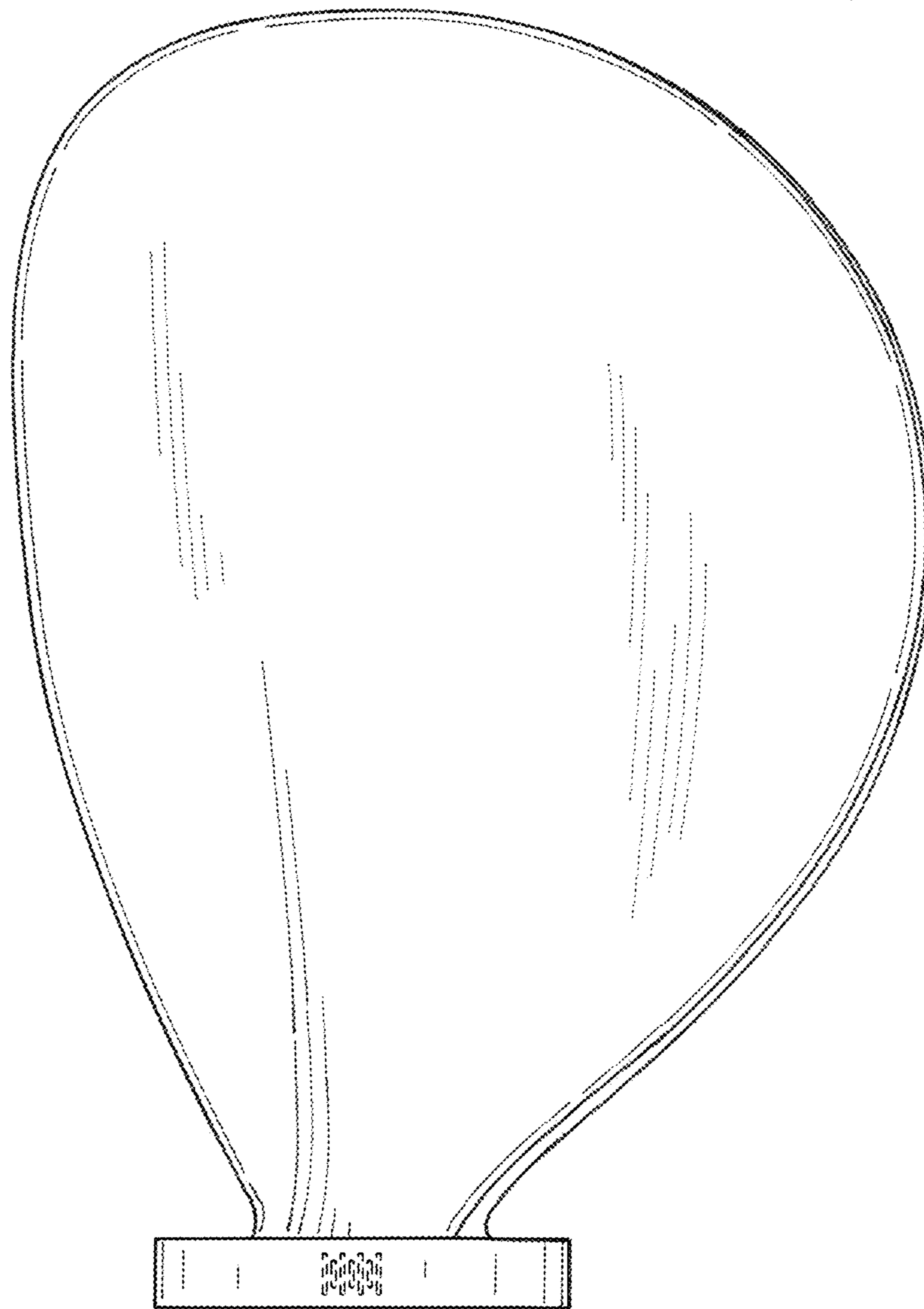


Fig.3

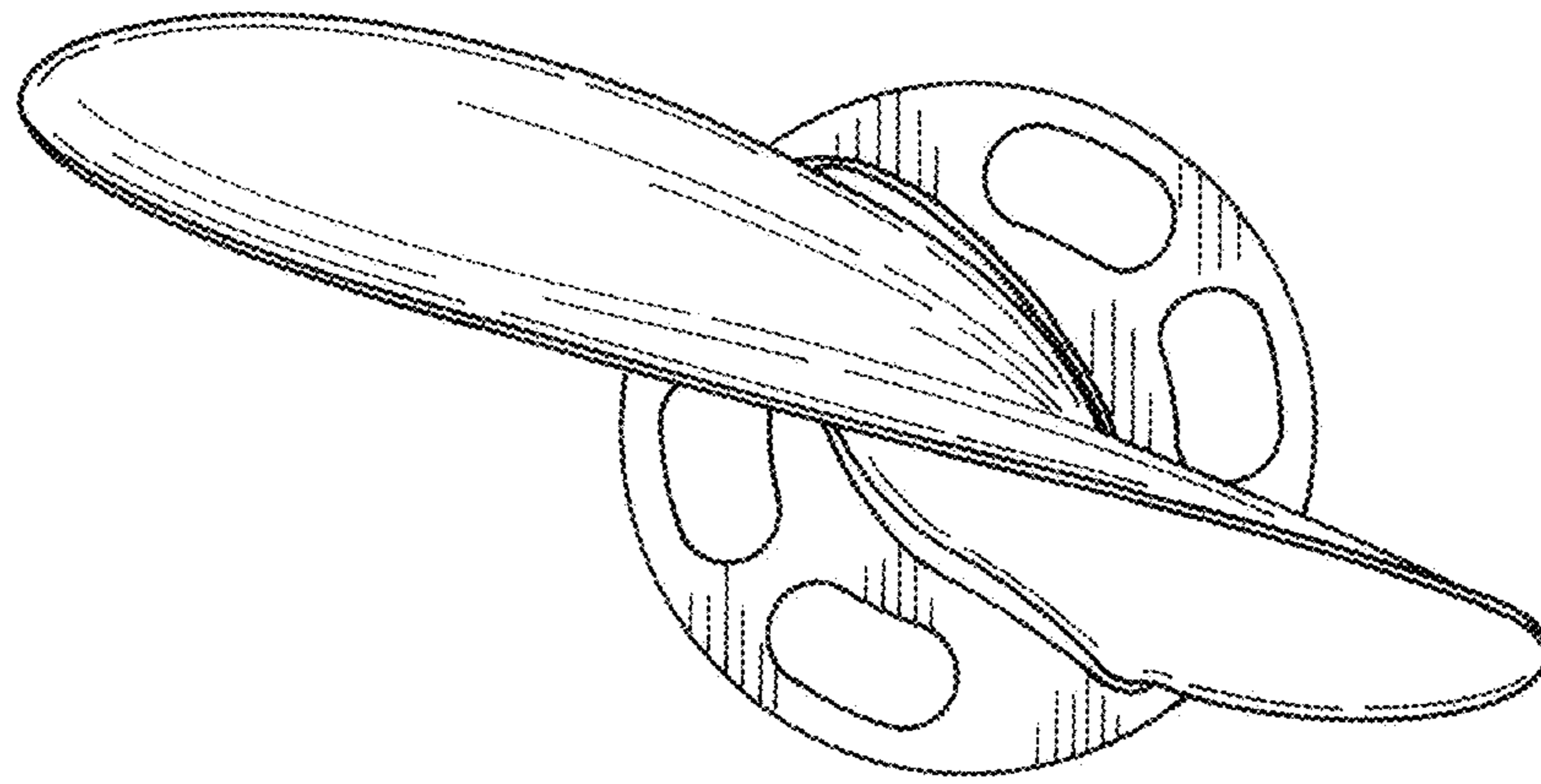


Fig.4

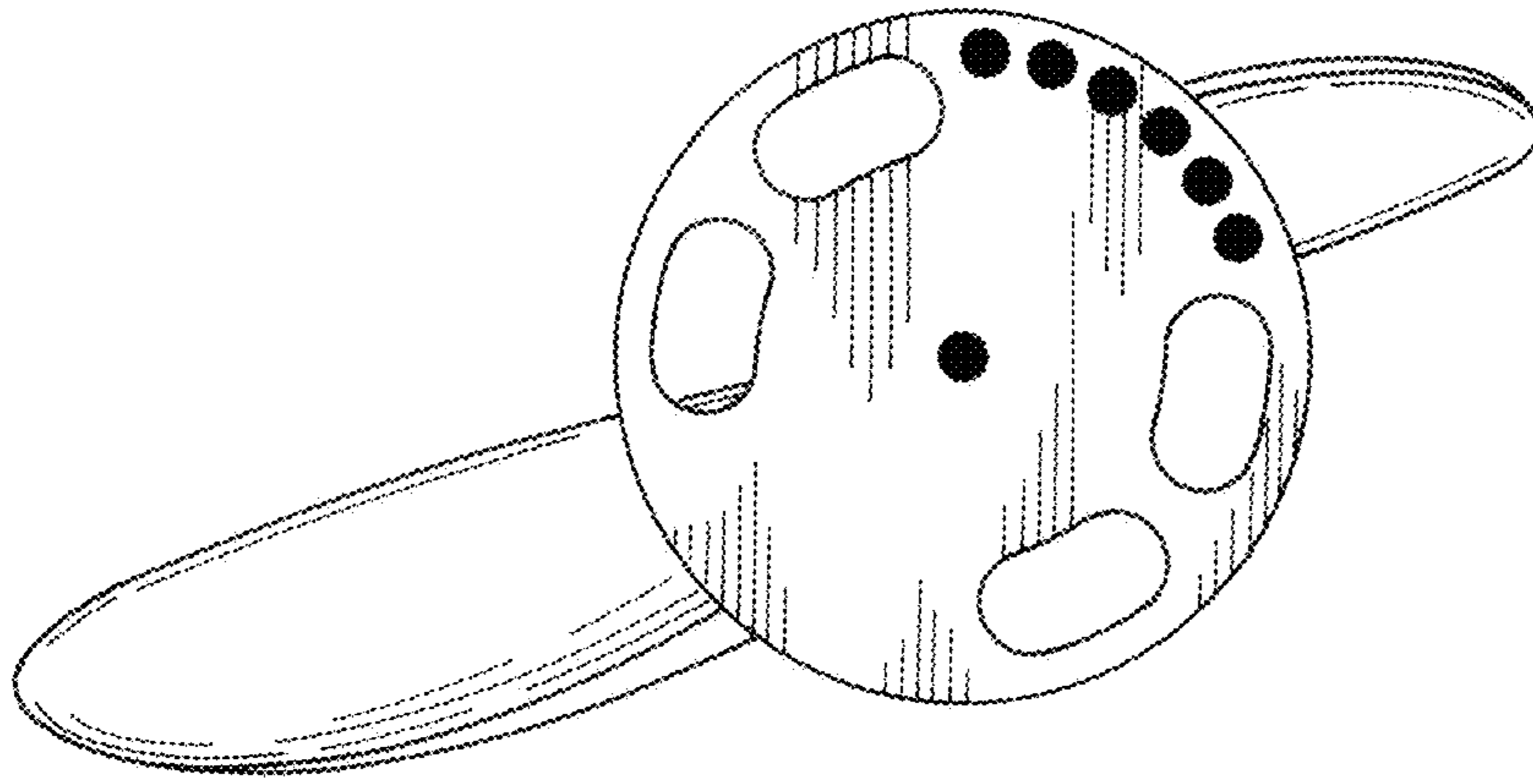


Fig.5

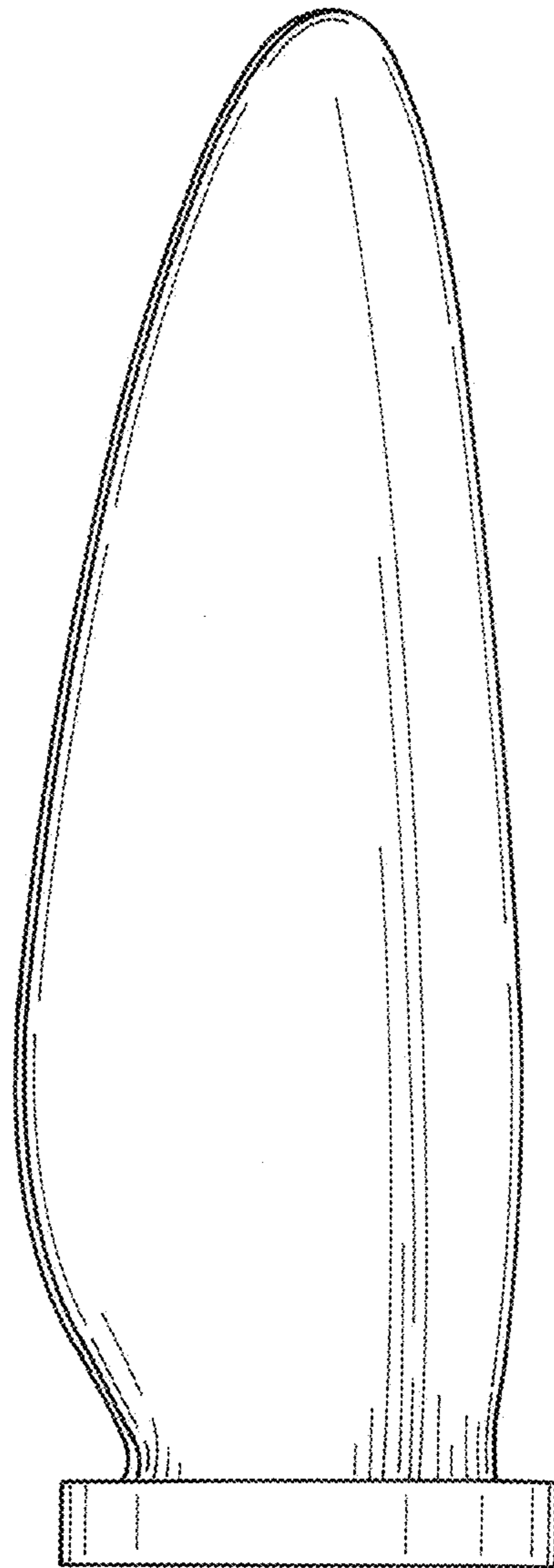


Fig.6

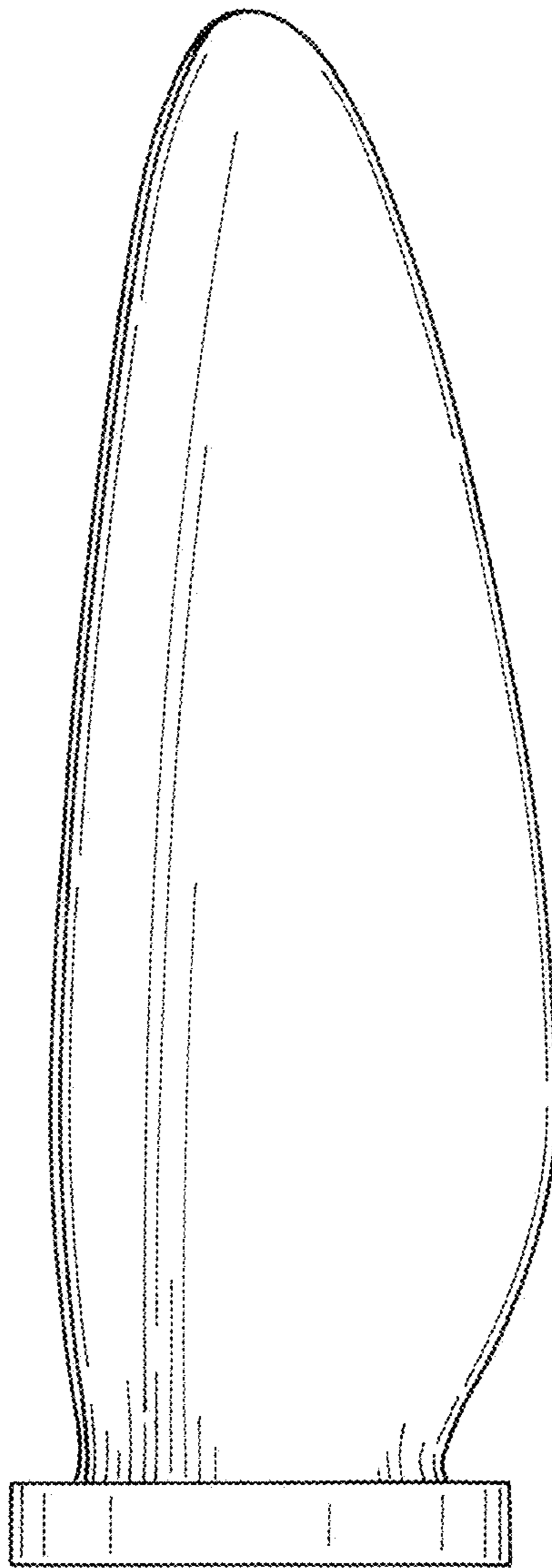


Fig. 7