



US00D585810S

(12) **United States Design Patent**  
**Van de Rostyne et al.**

(10) **Patent No.:** **US D585,810 S**  
(45) **Date of Patent:** **\*\* \*Feb. 3, 2009**

(54) **HELICOPTER PROPELLER**

(75) Inventors: **Alexander Jozef Magdalena Van de Rostyne**, Bornem (BE); **Chi Pok Billy Wai**, Quarry Bay (HK)

(73) Assignee: **Silverlit Toys Manufactory Ltd.**, Hong Kong (HK)

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

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

(21) Appl. No.: **29/283,934**

(22) Filed: **Aug. 27, 2007**

**Related U.S. Application Data**

(60) Continuation of application No. 29/277,652, filed on Mar. 5, 2007, now Pat. No. Des. 552,531, which is a division of application No. 29/275,322, filed on Dec. 20, 2006, now Pat. No. Des. 546,269, which is a continuation-in-part of application No. 11/462,177, filed on Aug. 3, 2006, and a continuation-in-part of application No. 11/465,781, filed on Aug. 18, 2006.

(30) **Foreign Application Priority Data**

Jan. 19, 2006 (BE) ..... 2006/0043

(51) **LOC (9) Cl.** ..... **12-07**

(52) **U.S. Cl.** ..... **D12/345**

(58) **Field of Classification Search** ..... D12/319-345; D21/441-442, 450, 453; 446/36-45, 230, 446/232; 244/17.11, 17.19, 17.21, 17.27, 244/17.23, 17.25

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

1,403,909 A 1/1922 Moir  
1,446,522 A 2/1923 Smith  
1,773,281 A 8/1930 Scott

1,800,470 A 4/1931 Oehmichen  
2,030,578 A 2/1936 Flettner  
2,307,381 A \* 1/1943 Bess ..... 416/236 R  
2,368,698 A 2/1945 Young  
2,384,516 A 9/1945 Young  
2,411,596 A 11/1946 Shapiro  
2,413,831 A 1/1947 Jordan  
2,429,502 A 10/1947 Young  
D149,130 S 3/1948 Katenberter et al.  
2,439,143 A 4/1948 Nemeth  
D153,314 S 4/1949 Piasecki  
D153,315 S 4/1949 Piasecki  
D153,316 S 4/1949 Piasecki  
D153,317 S 4/1949 Piasecki

(Continued)

**FOREIGN PATENT DOCUMENTS**

BE 338599 12/1926

(Continued)

**OTHER PUBLICATIONS**

Photographic reference #1, helicopter.

(Continued)

*Primary Examiner*—Ian Simmons

*Assistant Examiner*—Maurice Stevens

(74) *Attorney, Agent, or Firm*—Greenberg Traurig, LLP

(57) **CLAIM**

The ornamental design for a helicopter propeller, as shown and described.

**DESCRIPTION**

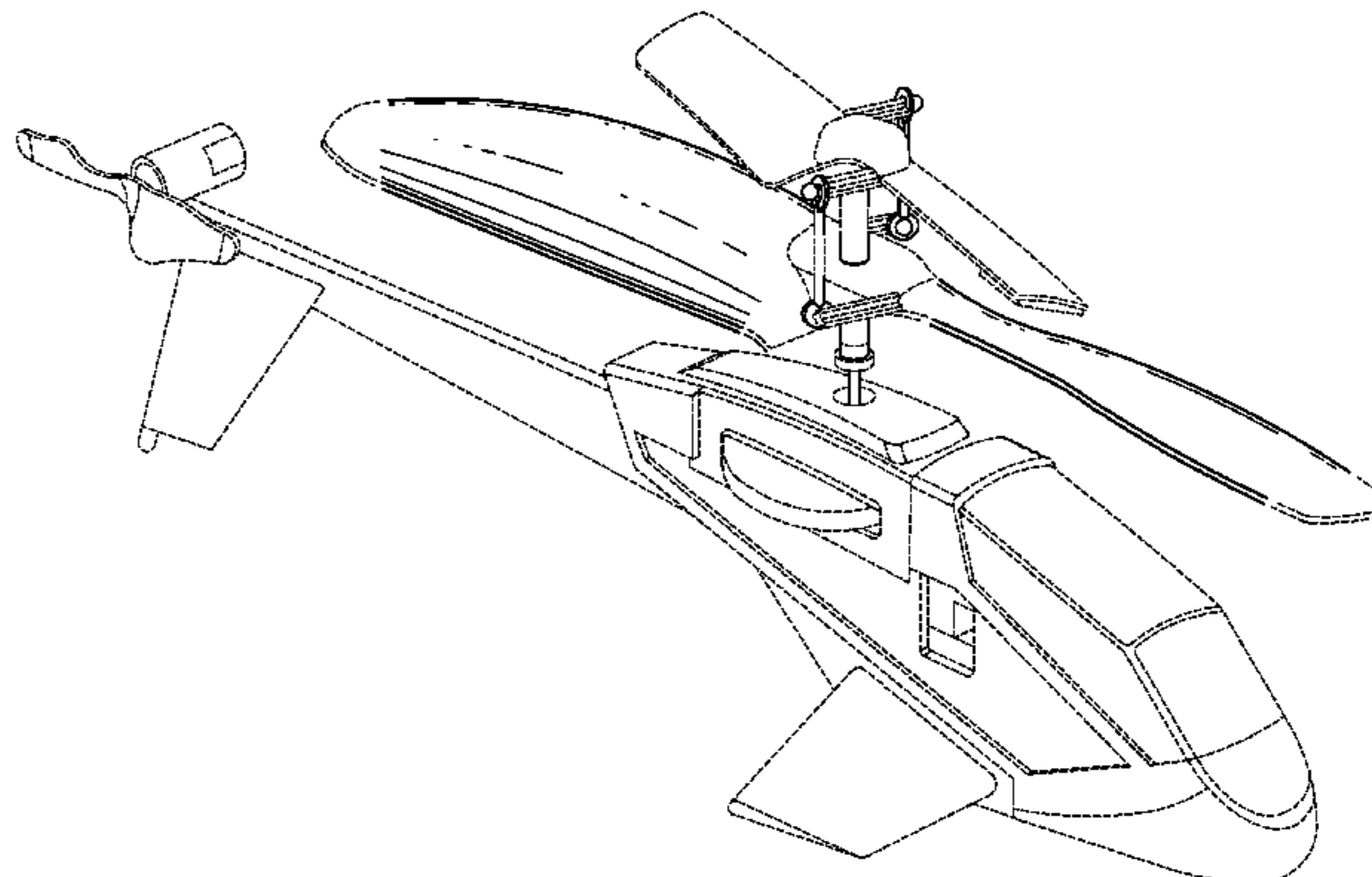
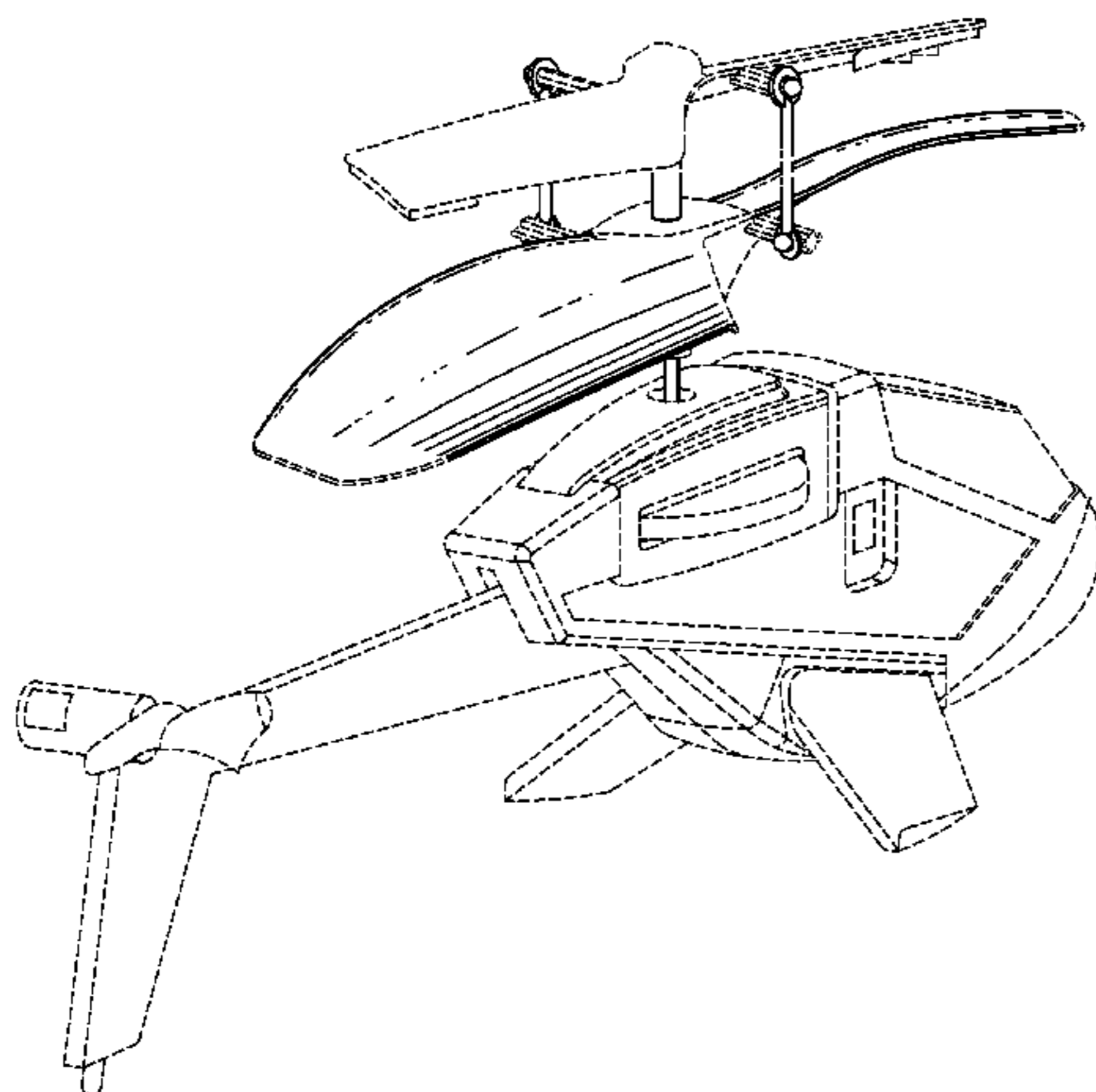
FIG. 1 is a perspective side view of a helicopter propeller; FIG. 2 is an opposite perspective side view of the helicopter propeller;

FIG. 3 is a side view of the helicopter propeller; and,

FIG. 4 is a top view of the helicopter propeller.

Broken lines are for illustrative purposes only and form no part of the claimed design.

**1 Claim, 4 Drawing Sheets**





2008/0112808 A1 5/2008 Schmaling et al.

FOREIGN PATENT DOCUMENTS

BE	1016960	11/2007
DE	1 270 408	6/1968
DE	40 17 402 A1	12/1991
DE	94 14 652 U1	11/1994
DE	203 14 041 U1	4/2004
EP	0 250 135	12/1987
EP	0 727 350	8/1996
EP	1462362 A1	9/2004
ES	P0233821	8/1957
ES	P0234258	9/1957
ES	P0245313	4/1959
ES	P0283794	1/1963
ES	490715	4/1980
ES	275141	7/1982
ES	0298826	1/1989
ES	0464158	1/1992
ES	2 074 010	8/1995
ES	0727350	8/1996
ES	2 172 362	9/2002
ES	1238185	9/2002
ES	1462362	9/2004
GB	255936	7/1926
GB	272871	5/1927
GB	916894 A	1/1963
GB	956536	4/1964
GB	958536	5/1964
GB	1081341 A	8/1967
GB	2 436 258 A	9/2007
JP	S30-7668	10/1930
JP	S32-003535	6/1932
JP	1269699	10/1989
JP	5192452	8/1993
JP	9048398	2/1997
JP	9512515	12/1997
JP	10076996	3/1998
JP	2000-272594	10/2000
JP	2003-103066	4/2003
JP	2003-220999	8/2003
JP	2005193905 A	7/2005
JP	2006-051217	2/2006
JP	2004121798 A	12/2006
WO	WO2006/075096	7/2006

OTHER PUBLICATIONS

Photographic reference #2, helicopter displaying writing in French on tail.  
 Photographic reference #3, explanation of the function of a flybar.  
 Photographic reference #4, toy helicopter, www.raidentech.com.  
 Photographic reference #5, toy helicopter.  
 Photographic reference #6, helicopter.  
 Photographic reference #7, helicopter with M40297 or MA0297 displayed on tail.  
 Photographic reference #8, toy helicopter #AHS-23900, hstoy.en.alibaba.com.  
 Photographic reference #9, toy helicopter, toys999.en.alibaba.com.  
 Mill, Colin. "Practical Theories, Part 9", W3MH—World Wide Web Model *Helicopter Magazine*, Jul. 1996, <http://www.w3mh.co.uk/articles/html/csm9-11.htm>.  
 Day, David. "Moving Swashplates & CCPM", 2001-2006. See <http://www.ironquios.free-online.co.uk>.  
 U.S. Appl. No. 11/953,823, filed Dec. 10, 2007, Van de Rostyne.  
 U.S. Appl. No. 11/953,826, filed Dec. 10, 2007, Van de Rostyne.  
 U.S. Appl. No. 11/953,830, filed Dec. 10, 2007, Van de Rostyne.  
 U.S. Appl. No. 29/282,581, filed Jul. 24, 2007, Van de Rostyne, et al.  
 U.S. Appl. No. 29/297,478, filed Nov. 12, 2007, Van de Rostyne, et al.  
 U.S. Appl. No. 29/297,479, filed Nov. 12, 2007, Van de Rostyne, et al.  
 U.S. Appl. No. 29/297,765, filed Nov. 16, 2007, Van de Rostyne, et al.  
 U.S. Appl. No. 29/302,018, filed Jan. 8, 2008, Van de Rostyne, et al.  
 U.S. Appl. No. 29/302,020, filed Jan. 8, 2008, Van de Rostyne, et al.

Photo of portion of PicooZ product package; Silverlit 2006 Product Catalog (5 pages total).  
 Partial International Search from PCT/US2006/047982.  
 Photographic prior art reference, Dragonfly helicopter (4 pages).  
*Piccolino: 1.69 gram RC helicopter - RDGroups.com*, <http://www.rcgroups.com/forums/showthread.php?t=509295> (6 pages).  
 International Search from PCT/US2008/051938.  
 Pryun, Richard R. "In-flight measurement of rotor blade airloads, bending moments, and motions, together with rotor shaft loads and fuselage vibration, on a tandem rotor helicopter", *Boeing*, Nov. 1967 (Abstract, 1 pg).  
 Brahmananda, et al. "Application of passive dampers to modern helicopters", *Smart Mater*, 1996 <http://www.iop.org/EJ/abstract/0964-1726/5/5/001> (Abstract, 1 pg).  
<http://www.microhelicopters.net> (3 pgs).  
 Castillo, et al. "Real-time stabilization and tracking of a four-rotor mini rotocraft", *IEEE*, Jul. 2004 [http://www.ieeexplore.org/xpl/freeabs\\_all.jsp?arnumber=1308180](http://www.ieeexplore.org/xpl/freeabs_all.jsp?arnumber=1308180) (1 pg).  
 "Structural Components; Design of Tilt-Rotor JVX Near Completion", *Aviation Week & Space Technology*, vol. 122, No. 2, p. 84, Jan. 14, 1985 (10 pgs).  
 European Search Opinion dated Jun. 10, 2008, in EP 06 845 583.1.  
 Website reference, [en.wikipedia.org/wiki/Kamov\\_Ka-50](http://en.wikipedia.org/wiki/Kamov_Ka-50), Kamov Ka-50, Jun. 19, 2004 (6 pages).  
 Photographic reference, [en.wikipedia.org/wiki/Image:Kamov\\_Ka-50\\_MAKS-2005.jpg](http://en.wikipedia.org/wiki/Image:Kamov_Ka-50_MAKS-2005.jpg), Aug. 28, 1995.  
 Photographic reference, [www.fas.org/man/dod-101/sys/ac/row/ka-50-hokum.jpg](http://www.fas.org/man/dod-101/sys/ac/row/ka-50-hokum.jpg), Aug. 28, 1995.  
 Photographic reference, [www.aviastar.org/foto/ka-50\\_1.jpg](http://www.aviastar.org/foto/ka-50_1.jpg), Aug. 28, 1995.  
 Website reference, [web.archive.org/web/20050225044931/http://www.silverlit.com](http://web.archive.org/web/20050225044931/http://www.silverlit.com) (2 pages), Jun. 5, 2007.  
 Website reference, [web.archive.org/web/20060616140712/boeing.com/rotorcraft/military/ah64d/index.htm](http://web.archive.org/web/20060616140712/boeing.com/rotorcraft/military/ah64d/index.htm), Nov. 23, 2001 (2 pages).  
 Website reference, [en.wikipedia.org/wiki/AH-64\\_Apache](http://en.wikipedia.org/wiki/AH-64_Apache), Jul. 16, 2004 (11 pages).  
 Website reference, <http://www.globalsecurity.org/military/systems/aircraft/ah-64d.htm>, Nov. 7, 2001 (6 pages).  
 Photographic reference, [www.fas.org/man/dod-101/sys/ac/ah-64.gif](http://www.fas.org/man/dod-101/sys/ac/ah-64.gif), Aug. 19, 2000.  
 Photographic reference, [en.wikipedia.org/wiki/Image:P320007.jpg](http://en.wikipedia.org/wiki/Image:P320007.jpg), 1981 (3 pages).  
 Photographic reference, [www.fas.org/man/dod-101/sys/ac/ah-64d\\_001.jpg](http://www.fas.org/man/dod-101/sys/ac/ah-64d_001.jpg), Mar. 21, 1997.  
 Photographic reference, [www.fas.org/man/dod-101/sys/ac/ah-64d-image83.jpg](http://www.fas.org/man/dod-101/sys/ac/ah-64d-image83.jpg), Aug. 19, 2000.  
 Photographic reference, [www.fas.org/man/dod-101/sys/ac/ah-64d-longbow1.jpg](http://www.fas.org/man/dod-101/sys/ac/ah-64d-longbow1.jpg), Aug. 19, 2000.  
 Photographic reference, [www.fas.org/man/dod-101/sys/ac/ah-64-dvic294.jpg](http://www.fas.org/man/dod-101/sys/ac/ah-64-dvic294.jpg), Feb. 2, 2003.  
 Photographic reference, [www.voodoo.cz/ah64/pics/ah115.jpg](http://www.voodoo.cz/ah64/pics/ah115.jpg), Jun. 14, 2001.  
 Photographic reference, [www.voodoo.cz/ah64/pics/ah122.jpg](http://www.voodoo.cz/ah64/pics/ah122.jpg), Jan. 10, 2002.  
 Photographic reference, [www.voodoo.cz/ah64/pics/ah106.jpg](http://www.voodoo.cz/ah64/pics/ah106.jpg), Jan. 9, 2002.  
 Photographic reference, [www.voodoo.cz/ah64/pics/ah112.jpg](http://www.voodoo.cz/ah64/pics/ah112.jpg), Aug. 22, 2002.  
 Photographic reference, [www.voodoo.cz/ah64/pics/ah092.jpg](http://www.voodoo.cz/ah64/pics/ah092.jpg), Jan. 8, 2002.  
 Photographic reference, [www.voodoo.cz/ah64/pics/ah153.jpg](http://www.voodoo.cz/ah64/pics/ah153.jpg), Apr. 4, 2002.  
 Photographic reference, [www.voodoo.cz/ah64/pics/ah149.jpg](http://www.voodoo.cz/ah64/pics/ah149.jpg), Jul. 8, 2000.  
 Photographic reference, [www.voodoo.cz/ah64/pics/ah051.jpg](http://www.voodoo.cz/ah64/pics/ah051.jpg), Jan. 8, 2002.  
 Photographic reference, [www.voodoo.cz/ah64/pics/ah049.jpg](http://www.voodoo.cz/ah64/pics/ah049.jpg), Mar. 15, 2002.  
 Photographic reference, [www.voodoo.cz/ah64/pics/ah027.jpg](http://www.voodoo.cz/ah64/pics/ah027.jpg), May 8, 1999.  
 Photographic reference, [www.voodoo.cz/ah64/pics/ah010.jpg](http://www.voodoo.cz/ah64/pics/ah010.jpg), Jul. 8, 2000.

## US D585,810 S

Page 4

---

Photographic reference, [www.voodoo.cz/ah64/pics/ah003.jpg](http://www.voodoo.cz/ah64/pics/ah003.jpg), Sep. 1, 2001.

Photographic reference, [www.airforceworld.com/heli/gfx/ah64/wah64\\_1.jpg](http://www.airforceworld.com/heli/gfx/ah64/wah64_1.jpg), 1991.

Photographic reference, [www.fas.org/man/dod-101/sys/ac/ah-64a-990421-F-2095R-004.jpg](http://www.fas.org/man/dod-101/sys/ac/ah-64a-990421-F-2095R-004.jpg), Aug. 19, 2000.

Photographic reference, [www.fas.org/man/dod-101/sys/ac/ah-64-dvic292.jpg](http://www.fas.org/man/dod-101/sys/ac/ah-64-dvic292.jpg), Aug. 19, 2000.

Website reference, [www.runryder.com/helicopter/t285494p1/](http://www.runryder.com/helicopter/t285494p1/), Jun. 12, 2007 (10 pages).

Website reference, [web.archive.org/web/20031218200732/http://www.scarlet.be/pixel/pixeli111.htm](http://web.archive.org/web/20031218200732/http://www.scarlet.be/pixel/pixeli111.htm), Dec. 18, 2003 (7 pages).

Website reference, [web.archive.org/web/200301017234927/http://www.scarlet.be/pixel/pixelfp.htm](http://web.archive.org/web/200301017234927/http://www.scarlet.be/pixel/pixelfp.htm), Oct. 17, 2003 (2 pages).

Website reference, [web.archive.org/web/20031218061901/http://pixelito.reference.be/](http://web.archive.org/web/20031218061901/http://pixelito.reference.be/), Dec. 18, 2003 (4 pages).

Website reference, [www.aviastar.org/helicopters\\_eng/breguet-dorand.php](http://www.aviastar.org/helicopters_eng/breguet-dorand.php), 1935 (4 pages).

Website reference, [www.lionheartcreations.com/Lionheartsflightsimsite\\_page7.html](http://www.lionheartcreations.com/Lionheartsflightsimsite_page7.html), May 6, 2004 (4 pages).

Website reference, [www.lionheartcreations.com/FalconE.html](http://www.lionheartcreations.com/FalconE.html), Jun. 22, 2004 (2 pages).

Photographic reference, [www.rotaryaction.com/images/airwolf4.jpg](http://www.rotaryaction.com/images/airwolf4.jpg), 1984.

Website reference, [www.rotaryaction.com/pages/airwolf.html](http://www.rotaryaction.com/pages/airwolf.html), 1984 (3 pages).

\* cited by examiner

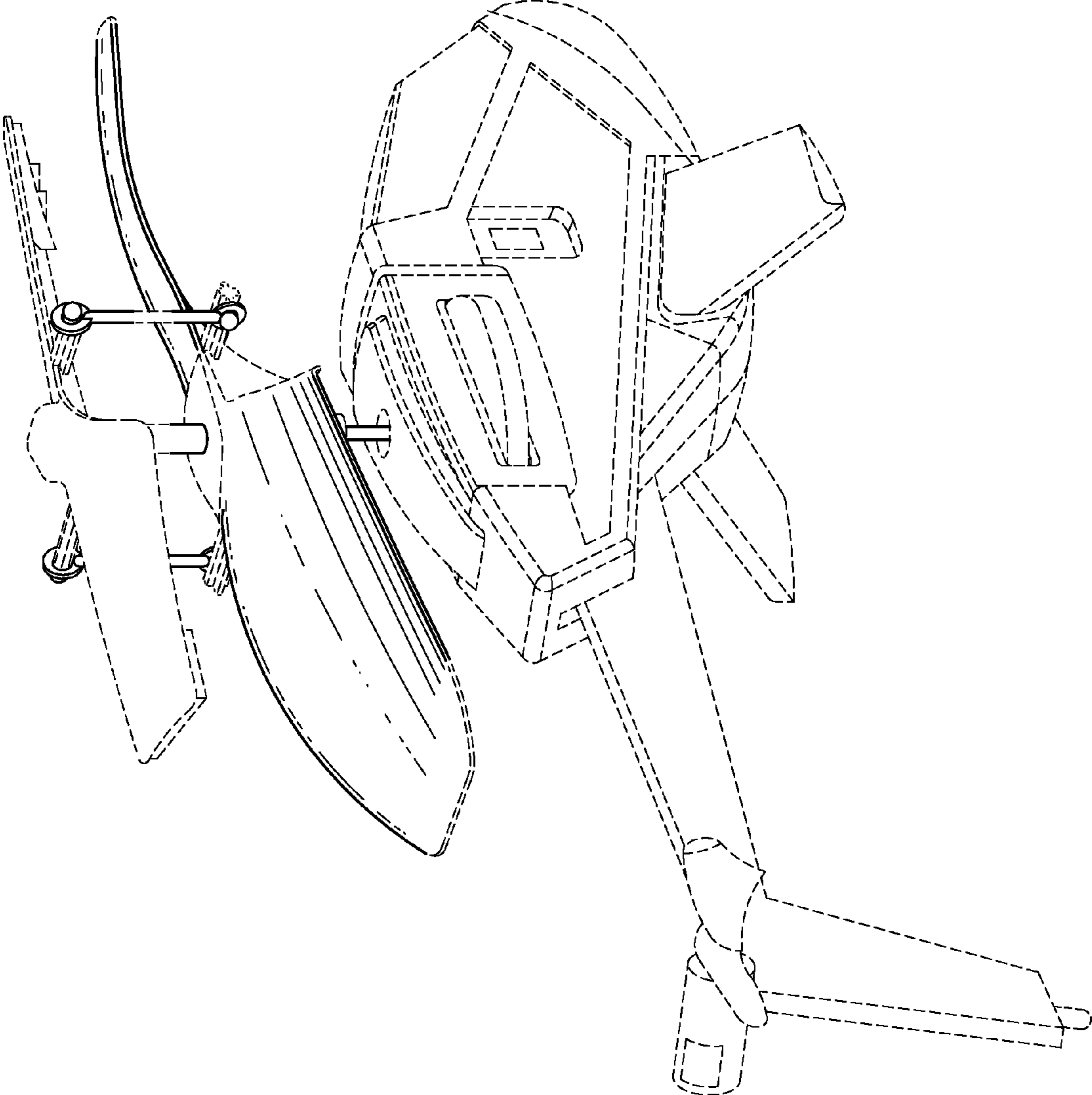


FIG. 1

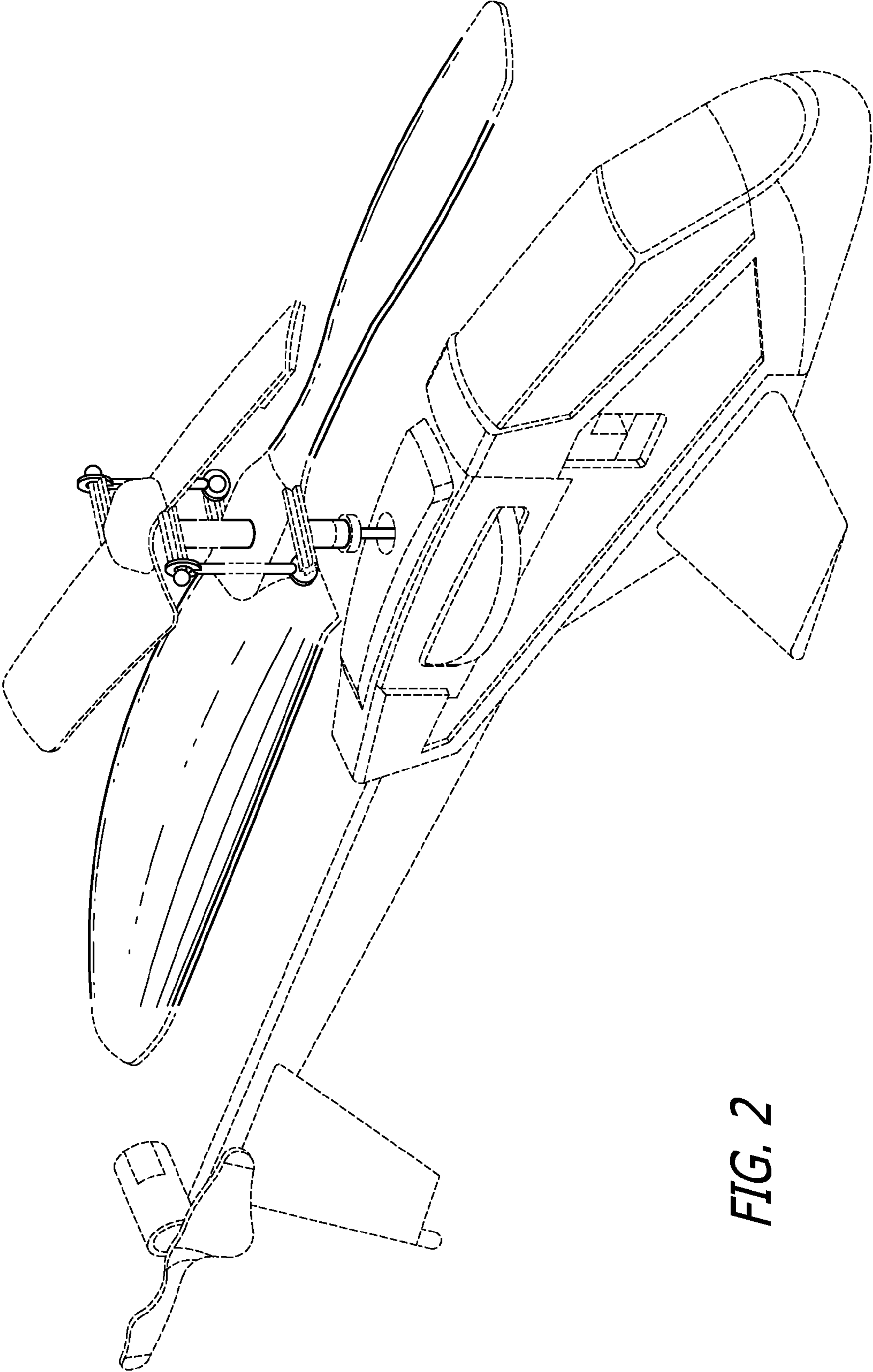


FIG. 2

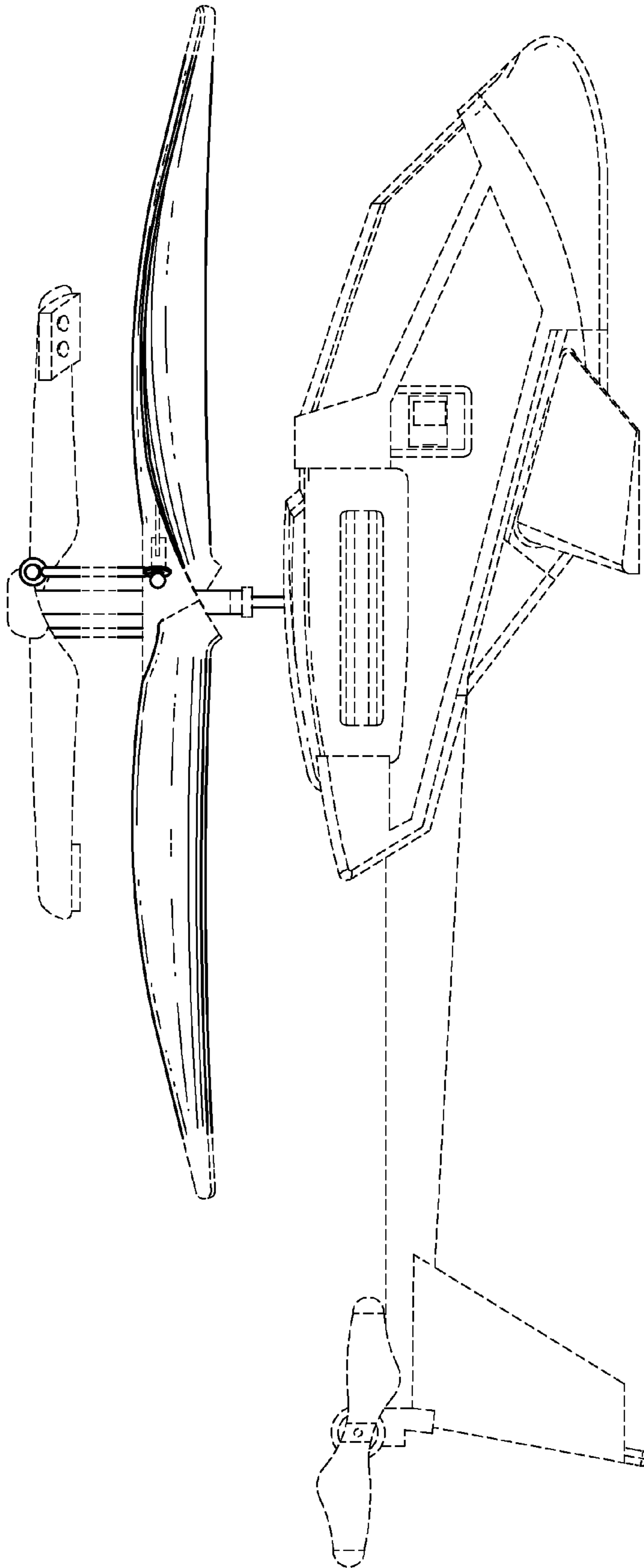


FIG. 3

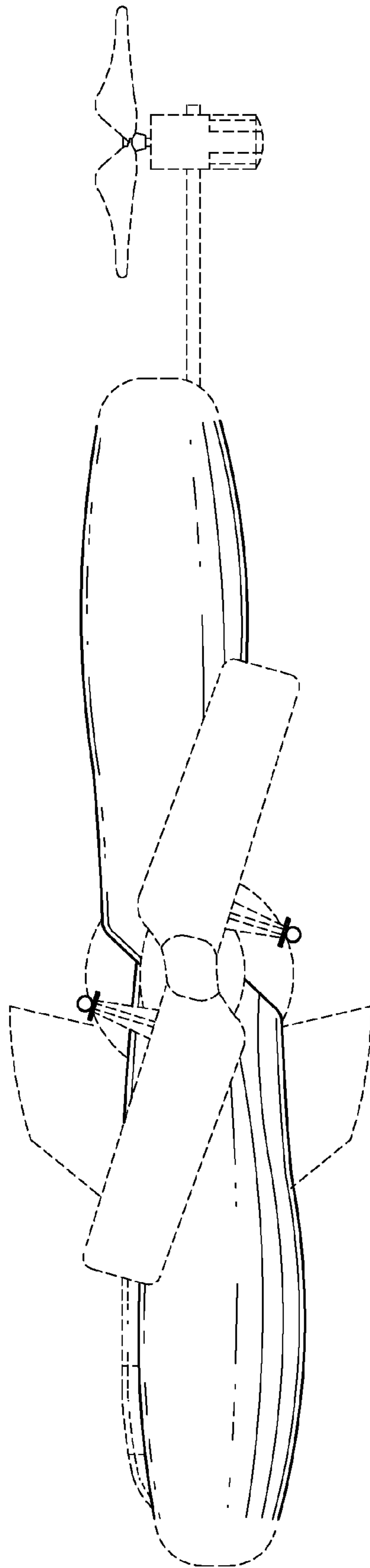


FIG. 4