



US00D946223S

(12) **United States Design Patent** (10) **Patent No.:** **US D946,223 S**
Mathias et al. (45) **Date of Patent:** **** Mar. 15, 2022**

(54) **CLEANING DEVICE**

(71) Applicant: **SharkNinja Operating LLC**,
Needham, MA (US)

(72) Inventors: **Richard Mathias**, Needham, MA (US);
Samuel Emrys James, London (GB);
Michael James Douglas, London (GB);
Da Deng, Needham, MA (US); **James**
P. Bilodeau, Littleton, MA (US); **Yu Ri**
Young Kim, Brighton, MA (US)

(73) Assignee: **SharkNinja Operating LLC**,
Needham, MA (US)

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

(21) Appl. No.: **29/724,431**

(22) Filed: **Feb. 14, 2020**

(51) **LOC (13) Cl.** **15-05**

(52) **U.S. Cl.**
USPC **D32/28**

(58) **Field of Classification Search**
USPC D32/38, 40, 45, 51
CPC A47L 7/0009; A47L 9/1409; A47L 13/256;
A47L 9/149; A47L 13/225; B01D 50/002;
B25G 3/38; H01L 21/6838

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

490,472 A 1/1893 Clements
2,055,734 A 9/1936 Sparklin
D117,388 S 10/1939 Woinarovicz
3,050,761 A 8/1962 Morgan
D214,977 S 8/1969 Roth
D247,949 S 5/1978 Tillinghast et al.
D250,245 S 11/1978 Bebb
D278,099 S 3/1985 Evans
D285,735 S * 9/1986 Hanyu D32/38

4,706,327 A 11/1987 Getz et al.
D293,142 S * 12/1987 Kubota D32/38
D312,154 S * 11/1990 Kuroda D32/38
D346,470 S * 4/1994 Zahuranec D32/38
5,365,881 A 11/1994 Spom
D358,238 S 5/1995 Barnett
5,664,285 A 9/1997 Melito et al.

(Continued)

FOREIGN PATENT DOCUMENTS

CN 103356140 A 10/2013
CN 205181229 U 4/2016

(Continued)

OTHER PUBLICATIONS

Shark Vacmop <https://www.lowes.com/pd/Shark-Shark-VACMOP-Cordless-Wet-Dry-Stick-Vacuum/1003074904> (Year: 2020).*

(Continued)

Primary Examiner — Michelle E. Wilson

Assistant Examiner — Richard E Yenchesky

(74) *Attorney, Agent, or Firm* — Mintz Levin Cohn Ferris
Glovsky and Popeo, PC; Lisa Adams

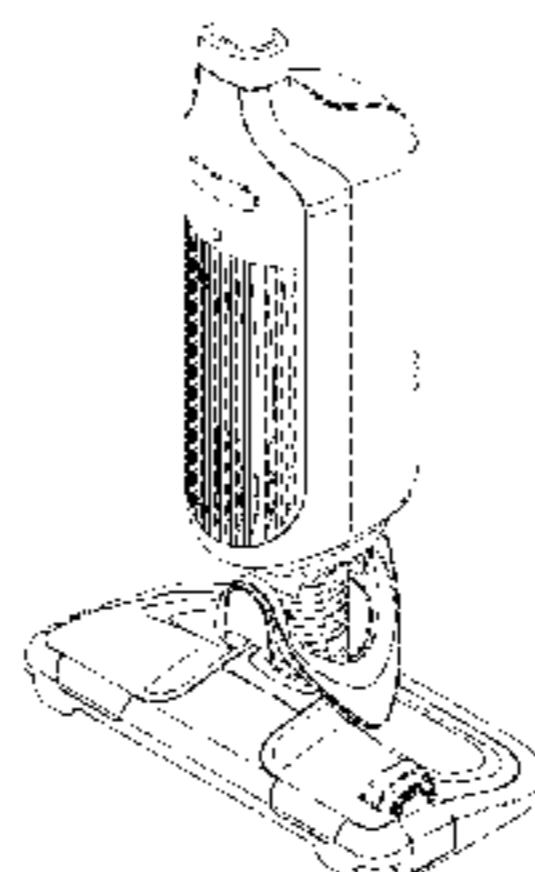
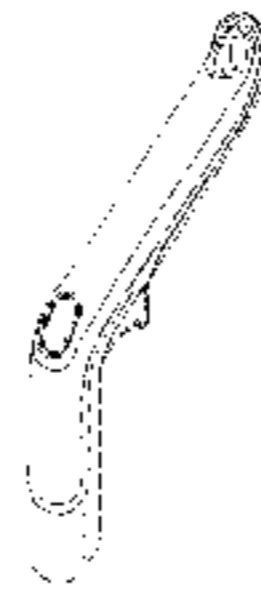
(57) **CLAIM**

We claim the ornamental design for the cleaning device, as shown and described.

DESCRIPTION

FIG. 1 is an isometric view of the cleaning device;
FIG. 2 is a front view of the cleaning device;
FIG. 3 is a rear view of the cleaning device;
FIG. 4 is a side view of the cleaning device;
FIG. 5 is another side view of the cleaning device;
FIG. 6 is a top view of the cleaning device; and,
FIG. 7 is a bottom view of the cleaning device.
Broken lines shown in the Figures indicate unclaimed subject matter.

1 Claim, 6 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

5,829,090 A	11/1998	Melito et al.	9,883,780 B2	2/2018	Kim et al.
D402,776 S	12/1998	Carlson	9,901,231 B2	2/2018	Tibberts
5,915,437 A	6/1999	Petner	D817,574 S	5/2018	Libman et al.
D423,157 S	4/2000	Hodges	10,524,625 B2	1/2020	James et al.
6,102,278 A	8/2000	Rothas	10,542,855 B2	1/2020	James et al.
6,453,506 B1	9/2002	Sumner	10,555,647 B2	2/2020	James et al.
6,571,421 B1	6/2003	Sham et al.	10,660,491 B2	5/2020	James et al.
6,797,357 B2	9/2004	Fereshtehkhou et al.	10,716,439 B2	7/2020	James et al.
D497,699 S *	10/2004	Chi-Hsiang D32/45	D910,257 S *	2/2021	Schneider D32/38
6,799,351 B2	10/2004	Porath	2003/0159230 A1	8/2003	Oh
D501,588 S *	2/2005	Harper D32/38	2003/0221274 A1	12/2003	Makhija et al.
D505,762 S *	5/2005	Lalanne D32/45	2004/0045126 A1	3/2004	Parker et al.
D506,050 S	6/2005	Lalanne et al.	2004/0134016 A1	7/2004	Kisela et al.
D507,088 S *	7/2005	Chi-Hsiang D32/45	2004/0134025 A1	7/2004	Murphy et al.
D510,467 S *	10/2005	Kizaki D32/38	2004/0139572 A1	7/2004	Kisela et al.
6,966,098 B2	11/2005	Sako et al.	2004/0141798 A1	7/2004	Garabedian et al.
7,013,528 B2	3/2006	Parker et al.	2004/0168281 A1	9/2004	Sako et al.
7,048,804 B2	5/2006	Kisela et al.	2004/0211022 A1	10/2004	Fan
7,137,169 B2	11/2006	Murphy et al.	2004/0250376 A1	12/2004	Hori et al.
7,150,069 B2	12/2006	Hori et al.	2005/0115409 A1	6/2005	Conrad
D547,509 S *	7/2007	Lin D32/38	2005/0193516 A1	9/2005	Hughes
D548,907 S	8/2007	Killen	2006/0000052 A1	1/2006	Budd
D548,910 S *	8/2007	Murray D32/45	2006/0018706 A1	1/2006	Bensussan et al.
D548,911 S *	8/2007	Main D32/38	2006/0048327 A1	3/2006	Lacotta et al.
D549,410 S *	8/2007	Orak D32/38	2006/0070196 A1	4/2006	Lacotta et al.
D549,910 S *	8/2007	Bouhuys D32/38	2006/0123590 A1	6/2006	Fester et al.
D554,815 S	11/2007	Harper et al.	2007/0061040 A1	3/2007	Augenbraun et al.
7,293,322 B2	11/2007	Matousek et al.	2007/0245511 A1	10/2007	Hahm et al.
D563,068 S	2/2008	Jiang et al.	2007/0251050 A1	11/2007	Harsh et al.
7,329,294 B2	2/2008	Conrad	2008/0040876 A1	2/2008	Aiyar
7,337,494 B2	3/2008	Baer et al.	2009/0100636 A1	4/2009	Sohn et al.
7,409,745 B2	8/2008	Dodson et al.	2009/0265872 A1 *	10/2009	Eldessouky B25G 3/38 15/144.1
D583,118 S *	12/2008	Snyder D32/51	2010/0024155 A1	2/2010	Policicchio et al.
D597,717 S *	8/2009	Rosenzweig A47L 13/225 D32/45	2010/0024156 A1	2/2010	De et al.
D602,218 S *	10/2009	Koenig D32/40	2010/0024157 A1	2/2010	Vernon et al.
7,673,361 B2	3/2010	Policicchio et al.	2010/0115719 A1	5/2010	West et al.
7,676,877 B2	3/2010	Policicchio et al.	2010/0251497 A1	10/2010	Arnold
D615,260 S	5/2010	Koenig	2010/0306939 A1	12/2010	Dingert
7,861,351 B2	1/2011	Ho	2011/0088209 A1	4/2011	Ivarsson
7,934,287 B2	5/2011	De Soto-Burt et al.	2012/0159728 A1	6/2012	Suda et al.
D644,386 S	8/2011	Tawara et al.	2012/0311813 A1	12/2012	Gilbert et al.
8,020,236 B2	9/2011	Kaleta et al.	2013/0055521 A1	3/2013	Lee et al.
8,062,398 B2	11/2011	Luo et al.	2013/0291333 A1	11/2013	Grey
8,065,778 B2	11/2011	Kim et al.	2014/0033470 A1	2/2014	Codling
D653,414 S *	1/2012	Genoa D32/38	2014/0033471 A1	2/2014	Toole et al.
D653,826 S	2/2012	Lee	2015/0128364 A1	5/2015	Dooley et al.
D657,518 S *	4/2012	McGee D32/45	2015/0223662 A1	8/2015	Doherty-Stapp et al.
D657,928 S	4/2012	Byrne	2015/0250368 A1	9/2015	Kim et al.
D658,836 S	5/2012	Ediger et al.	2016/0167128 A1 *	6/2016	Stalder B01D 50/002 164/76.1
D661,034 S	5/2012	Ediger et al.	2016/0174793 A1	6/2016	Burke et al.
D672,107 S	12/2012	Van Ledingham, Jr. et al.	2016/0353963 A1	12/2016	Kellis et al.
8,341,802 B2	1/2013	Kim et al.	2017/0007086 A1	1/2017	Kleine-Doepke et al.
D677,031 S	2/2013	Best et al.	2017/0049292 A1	2/2017	Harrington et al.
8,458,850 B2	6/2013	Kasper et al.	2017/0119223 A1	5/2017	Staf
D685,557 S *	7/2013	Rosenzweig D32/45	2017/0202421 A1	7/2017	Hwang et al.
D686,383 S *	7/2013	Di Bono D32/38	2018/0014711 A1	1/2018	Rostami
8,495,781 B2	7/2013	Dingert	2018/0035855 A1	2/2018	Wood
8,584,309 B2	11/2013	Santiago	2018/0055315 A1	3/2018	Conrad
D703,407 S	4/2014	Xiong	2018/0177367 A1	6/2018	Amaral et al.
D720,906 S	1/2015	Baldwin	2018/0220861 A1	8/2018	Zhang et al.
D731,137 S	6/2015	Colangelo	2019/0075984 A1	3/2019	James et al.
D764,127 S	8/2016	Vicari et al.	2019/0269289 A1	9/2019	Xu et al.
D765,331 S *	8/2016	Chei D32/45	2019/0274496 A1	9/2019	James et al.
D766,527 S *	9/2016	Niedzwecki D32/45	2019/0274497 A1	9/2019	James et al.
D766,528 S	9/2016	Choi et al.	2019/0274498 A1	9/2019	James et al.
D766,584 S	9/2016	Blouin et al.	2019/0274500 A1	9/2019	Thorne et al.
9,504,366 B2	11/2016	Kasper et al.	2019/0282045 A1	9/2019	James et al.
9,545,180 B2	1/2017	Conrad	2020/0187737 A1	6/2020	Croggon et al.
9,560,944 B2	2/2017	Grey	2021/0010685 A1 *	1/2021	Hackert A47L 9/149
9,661,968 B2	5/2017	Bradbury	2021/0015320 A1	1/2021	James et al.
D792,043 S	7/2017	Buckley et al.	2021/0015322 A1	1/2021	James et al.
D793,639 S	8/2017	Schuller et al.	2021/0015323 A1	1/2021	James et al.
9,788,695 B2	10/2017	Wood	2021/0015324 A1 *	1/2021	James A47L 13/256
D804,123 S	11/2017	Orsino	2021/0015325 A1	1/2021	James et al.
			2021/0015326 A1	1/2021	James et al.
			2021/0022571 A1	1/2021	James et al.
			2021/0022575 A1	1/2021	Croggon et al.

(56)

References Cited

U.S. PATENT DOCUMENTS

2021/0045601 A1* 2/2021 Douglas A47L 9/1409
 2021/0127917 A1* 5/2021 James A47L 7/0009
 2021/0166956 A1* 6/2021 Tatsumi H01L 21/6838

FOREIGN PATENT DOCUMENTS

DE	667452	C	11/1938
EP	1027844	A2	8/2000
EP	1525839	A2	4/2005
JP	2003326121	A	11/2003
JP	2006198083	A	8/2006
JP	D1489801	S	2/2014
KR	20170043227	A	4/2017
WO	2004062454	A2	7/2004
WO	2004062457	A2	7/2004
WO	2005018402	A2	3/2005
WO	2010014366	A1	2/2010
WO	2010014367	A1	2/2010
WO	2011017493	A2	2/2011
WO	2011112545	A2	9/2011
WO	2014020303	A1	2/2014
WO	2014104503	A1	7/2014
WO	2016022270	A1	2/2016
WO	2016062647	A1	4/2016
WO	2016095040	A1	6/2016
WO	2016100964	A2	6/2016
WO	2017144918	A1	8/2017
WO	2019051431	A1	3/2019

OTHER PUBLICATIONS

U.S. Appl. No. 29/724,404, filed Feb. 14, 2020, Cleaning Device.
 U.S. Appl. No. 29/724,416, filed Feb. 14, 2020, Cleaning Device.
 U.S. Appl. No. 29/724,437, filed Feb. 14, 2020, Cleaning Device.
 (2016) Amazon.com—Shark Genius Steam Pocket Mop Hard Floor
 Cleaner, oldest reviews 2016, https://www.amazon.com/cleaner-Blaster-Technology-Intelligent-S5003D/dp/B01KU4BSGK/ref=cm_cr_arp_d_product_top?ie=UTF8, 11 pages.

Extended European Search Report received for EP Application No. 18854457.1, dated Apr. 2, 2020, 5 pages.

Extended European Search Report received for EP Application No. 19215569.5, dated May 15, 2020, 5 pages.

International Preliminary Report on Patentability received for PCT Application No. PCT/US2018/050308, dated Mar. 26, 2020, 13 pages.

International Search Report and Written Opinion received for PCT Application No. PCT/US2018/050308, dated Nov. 26, 2018, 15 pages.

International Search Report and Written Opinion received for PCT Application No. PCT/US2019/059327, dated Feb. 6, 2020, 10 pages.

International Search Report and Written Opinion received for PCT Application No. PCT/US2019/067121, dated May 7, 2020, 12 pages.

International Search Report and Written Opinion received for PCT Application No. PCT/US2020/058146, dated Feb. 2, 2021, 13 pages.

International Search Report and Written Opinion received for PCT Application No. PCT/US2020/058162, dated Feb. 2, 2021, 12 pages.

International Search Report and Written Opinion received for PCT Application No. PCT/US2020/059491, dated Feb. 2, 2021, 9 pages.

International Search Report and Written Opinion received for PCT Application No. PCT/US2020/059503, dated Feb. 3, 2021, 7 pages.

International Search Report and Written Opinion received for PCT Application No. PCT/US2020/058195, dated Dec. 21, 2020, 13 pages.

Invitation to Pay Additional Fees received for PCT Application No. PCT/US2020/062158, dated Jan. 11, 2021, 2 pages.

(Aug. 1, 2019) N.K. Multi-Tech Filters Pvt. Limited, Available at: https://www.airfiltersindia.net/product_temp_No_Upload.html, 4 Pages.

Design U.S. Appl. No. 29/680,842, filed Feb. 20, 2019, Richard R. Mathias et al., 4 pages.

Walmart (2020) “Shark VACMOP™ Cordless Hard Floor Vacuum Mop with Disposable VACMOP Pad, VM200”, <https://www.walmart.com/reviews/product/842647132?sort=submission-asc>, 12 pages.

* cited by examiner

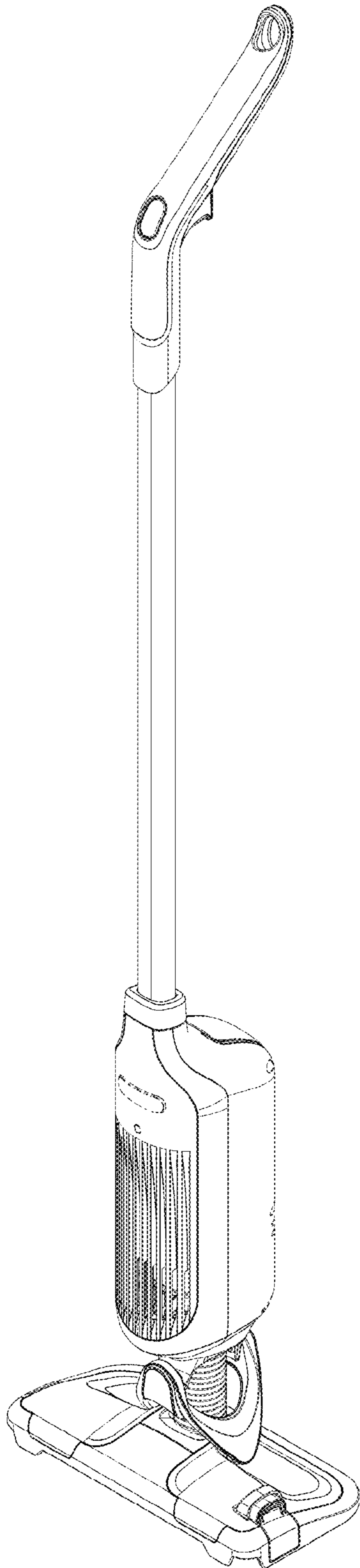


FIG. 1

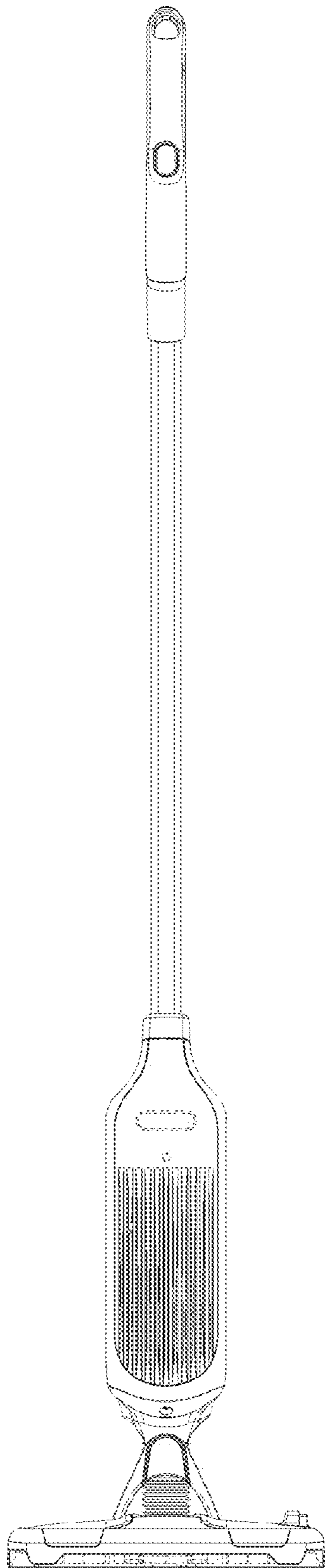


FIG. 2

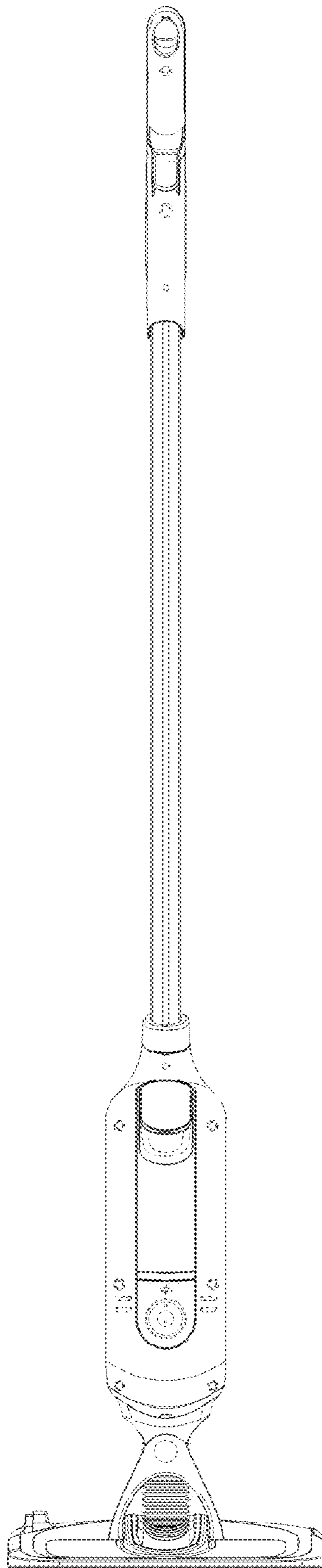


FIG. 3

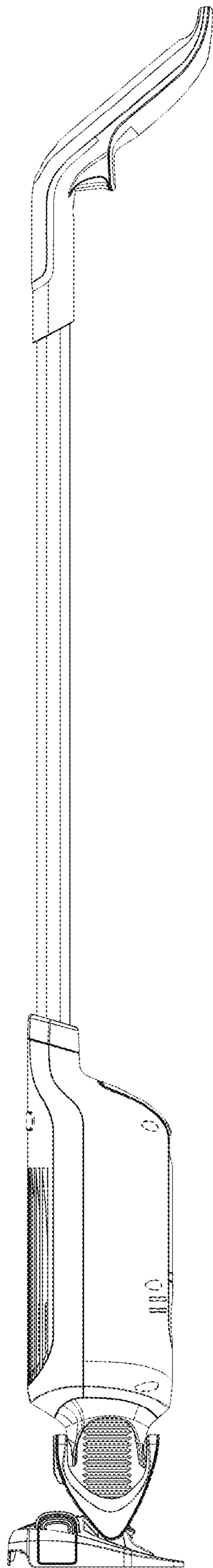


FIG. 4

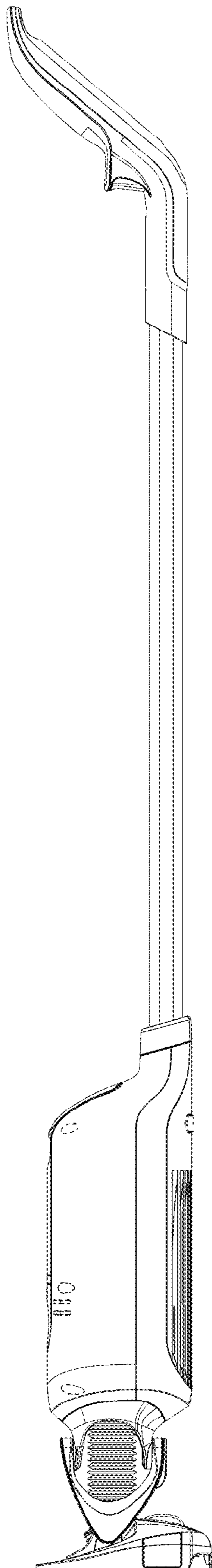


FIG. 5

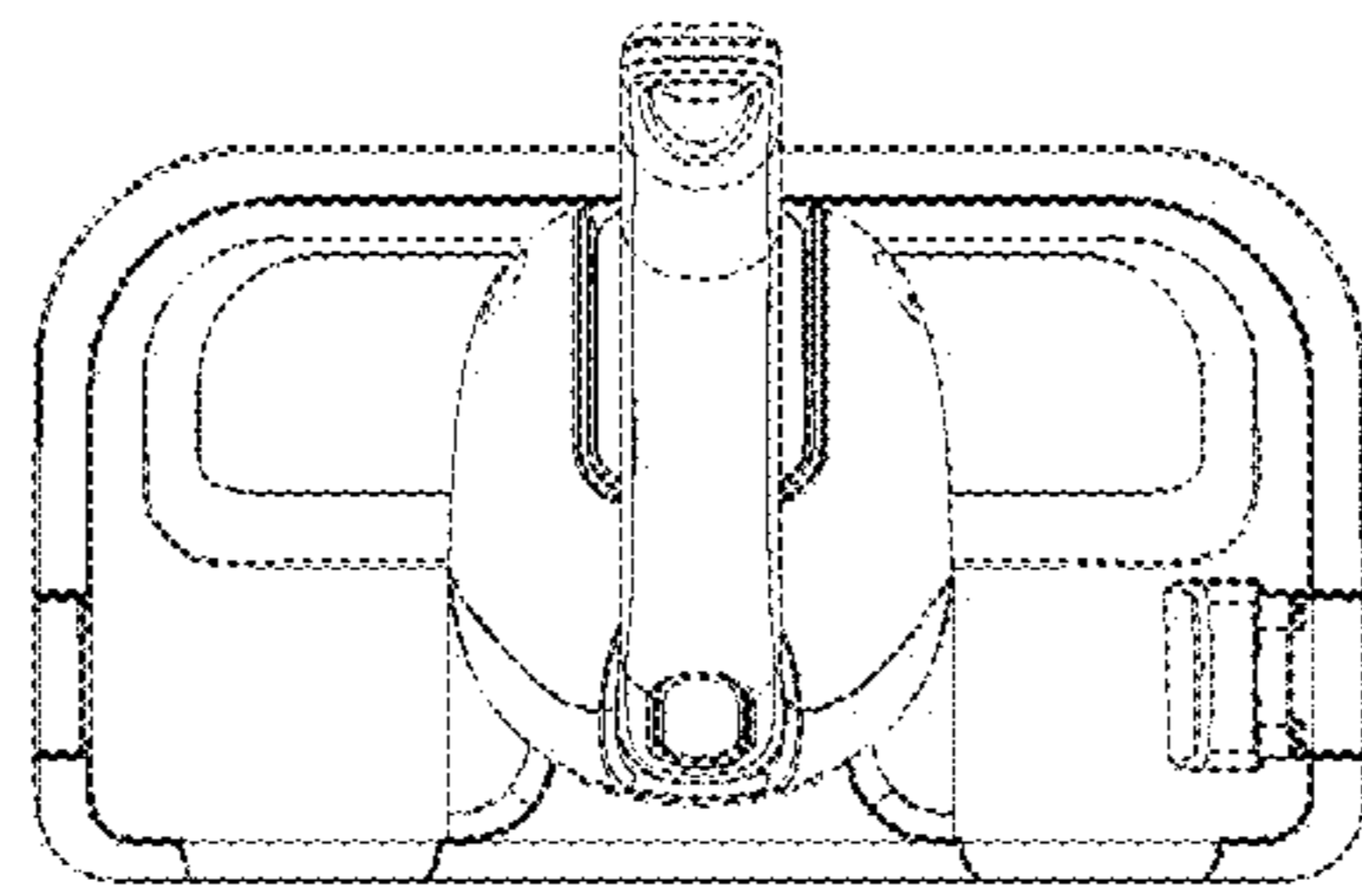


FIG. 6

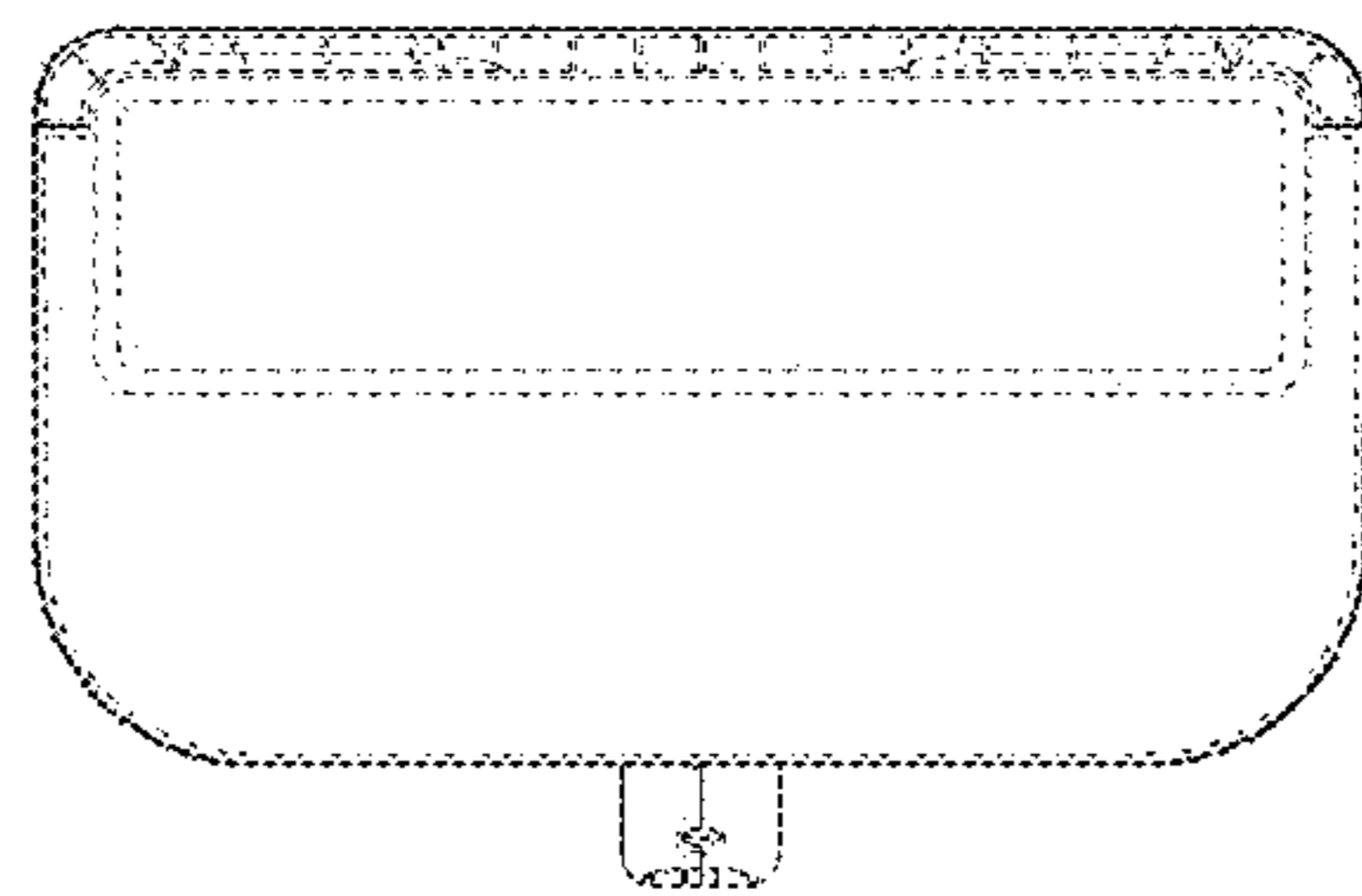


FIG. 7