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(12) United States Design Patent

Farris et al.

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(54) **INJECTOR DEVICE**

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

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Related U.S. Application Data

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(51) **LOC (12) Cl.** **24-02**

(52) **U.S. Cl.**
USPC **D24/113**

(58) **Field of Classification Search**
USPC D24/112–114, 133, 186, 104, 130, 127, D24/176, 108, 110, 220; 606/181, 185; 604/232, 187, 158, 164.08, 192, 263, 163, 604/181, 184, 198, 227, 168.01, 275, 604/890.1; D9/414, 424, 417, 426
CPC A61M 2005/14252; A61M 2005/1581; A61M 5/14248; A61M 2005/14513; A61M 2005/206
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D369,864	S	5/1996	Petersen	
D370,011	S	5/1996	Lindeman	
D389,139	S	1/1998	Oross et al.	
D421,902	S	3/2000	Hill	
D424,626	S *	5/2000	Goto	D21/329
6,186,982	B1	2/2001	Gross et al.	
D441,185	S *	5/2001	Shimizu	D13/168
D443,508	S	6/2001	Braaten et al.	

(Continued)

FOREIGN PATENT DOCUMENTS

JP	D1441740	S	5/2013
JP	2013-192637	A	9/2013

(Continued)

OTHER PUBLICATIONS

Reynolds, "Integrated Solutions for the Delivery of High-Volume Biologics", West Pharmaceutical Services, www.ondrugdelivery.com, Copyright 2014, 4 pages.

(Continued)

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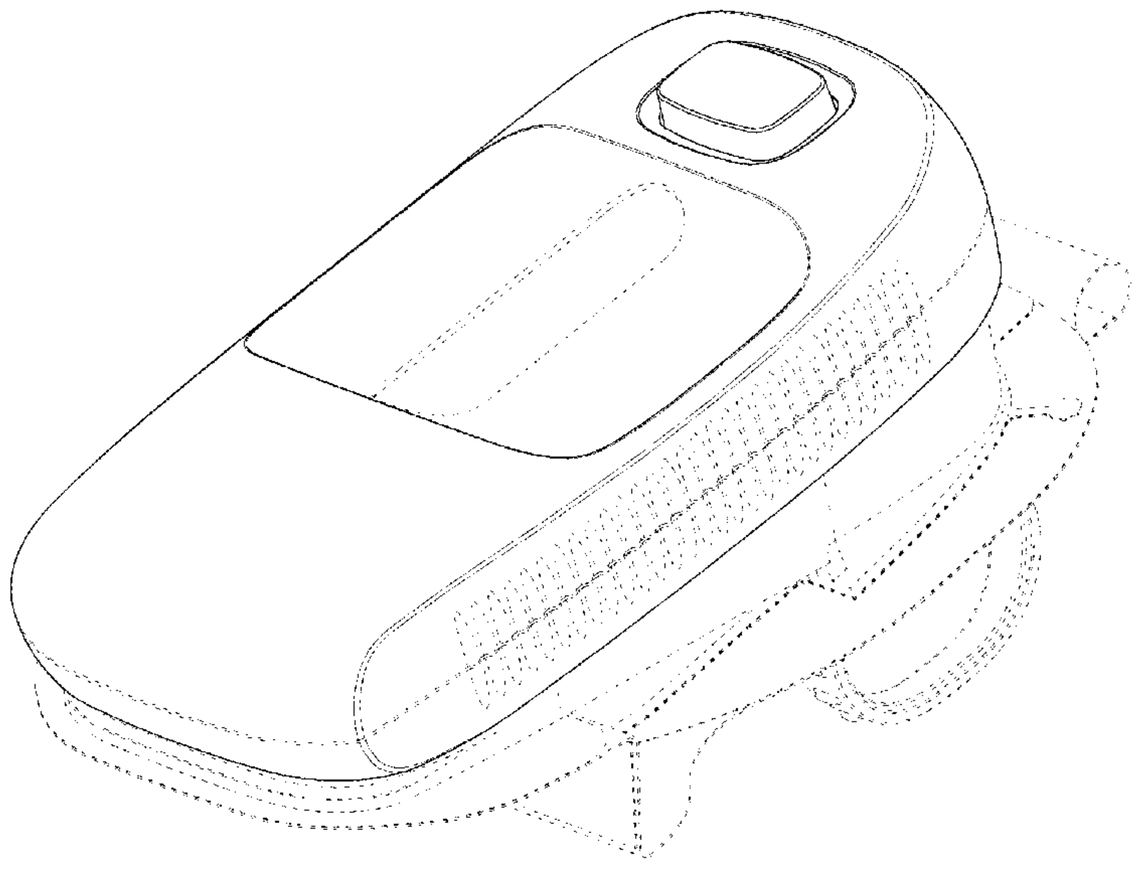
(57) **CLAIM**

The design of an injector device, as shown and described.

DESCRIPTION

FIG. **1** is a top, front, right perspective view of an injector device of our design;
FIG. **2** is a front elevation view thereof;
FIG. **3** is a rear elevation view thereof;
FIG. **4** is a left side elevation view thereof;
FIG. **5** is a right side elevation view thereof;
FIG. **6** is a top plan view thereof;
FIG. **7** is a bottom plan view thereof; and,
FIG. **8** is an exploded perspective view thereof.
The broken lines show portions of the design that form no part of the claimed design.

1 Claim, 8 Drawing Sheets



(56) **References Cited**

U.S. PATENT DOCUMENTS

D445,496	S	7/2001	Anderson	
6,500,150	B1	12/2002	Gross et al.	
D471,274	S	3/2003	Diaz et al.	
6,530,900	B1	3/2003	Daily et al.	
D474,543	S	5/2003	Lee et al.	
6,613,015	B2	9/2003	Sandstrom et al.	
D483,281	S *	12/2003	Cobigo	D10/104.1
D490,069	S *	5/2004	Lee	D14/188
D495,303	S *	8/2004	Coullahan	D13/168
6,800,071	B1	10/2004	McConnell et al.	
6,843,782	B2	1/2005	Gross et al.	
6,889,690	B2 *	5/2005	Crowder	A61M 15/0045 128/203.15
D514,097	S *	1/2006	De Leon	D14/191
D544,092	S	6/2007	Lewis	
D552,184	S *	10/2007	Hussaini	D14/496
D602,586	S *	10/2009	Foley	D24/113
D619,338	S	7/2010	Teichert et al.	
D622,685	S	8/2010	Garra et al.	
7,780,636	B2	8/2010	Radmer et al.	
7,931,621	B2 *	4/2011	Cross	A61M 5/1413 604/158
7,967,795	B1	6/2011	Cabiri	
D640,920	S	7/2011	Giraud et al.	
D646,159	S	10/2011	Bellamah et al.	
8,152,779	B2	4/2012	Cabiri	
8,157,769	B2	4/2012	Cabiri	
8,210,172	B2	7/2012	Crowder et al.	
D667,382	S *	9/2012	Cosentino	D13/168
8,303,549	B2	11/2012	Mejlhede et al.	
8,313,467	B2	11/2012	Chong et al.	
8,348,898	B2	1/2013	Cabiri	
8,393,357	B2	3/2013	Chong et al.	
D683,848	S	6/2013	Ogura et al.	
D684,686	S	6/2013	Cronenberg	
D685,083	S	6/2013	Schneider et al.	
D685,084	S	6/2013	Guarraia et al.	
8,465,455	B2	6/2013	Cabiri	
D687,140	S	7/2013	Guarraia et al.	
D687,141	S	7/2013	Schneider et al.	
D687,536	S	8/2013	Guarraia et al.	
D688,784	S	8/2013	Schneider et al.	
8,613,719	B2 *	12/2013	Karratt	A61M 5/14248 604/131
D702,834	S	4/2014	Norton et al.	
D714,266	S	9/2014	Okamura et al.	
8,882,711	B2	11/2014	Saulenas et al.	
D722,870	S	2/2015	Fohner et al.	
8,986,250	B2	3/2015	Beebe et al.	
9,011,164	B2	4/2015	Filman et al.	
9,173,997	B2	11/2015	Gross et al.	
D745,661	S	12/2015	Collins et al.	
D753,810	S	4/2016	Chang	
D755,950	S	5/2016	Meliniotis et al.	
D760,374	S	6/2016	Nagar et al.	
9,373,269	B2	6/2016	Bergman et al.	
D764,047	S	8/2016	Bjelovuk et al.	
9,421,323	B2	8/2016	Cabin et al.	
D769,438	S	10/2016	Crosby et al.	
D770,037	S	10/2016	Schleicher et al.	
9,463,280	B2	10/2016	Cabiri	
9,492,614	B2	11/2016	Kamen et al.	
D776,262	S	1/2017	Tyce et al.	
D776,265	S	1/2017	Tyce et al.	
D777,331	S	1/2017	Jayalath et al.	
9,656,019	B2	5/2017	Cabin et al.	
D792,359	S *	7/2017	Nakagawa	D13/168
D794,806	S *	8/2017	Kranz	D24/186
D801,538	S *	10/2017	Rondoni	D24/186
D806,232	S *	12/2017	Hwang	D24/112
D810,948	S *	2/2018	Wielunski	D24/186
D812,739	S *	3/2018	Wolford	D24/111
D825,356	S *	8/2018	Yu	D10/70
D836,568	S *	12/2018	Miller	D13/168
D847,976	S *	5/2019	Protasiewicz	D24/113
2005/0064917	A1 *	3/2005	Peng	H04M 1/021 455/575.1
2007/0021733	A1	1/2007	Hansen et al.	
2008/0215015	A1	9/2008	Cindrich et al.	
2009/0093792	A1	4/2009	Gross et al.	
2009/0240240	A1 *	9/2009	Hines	A61M 5/14248 604/890.1
2012/0035546	A1	2/2012	Cabiri	
2013/0110049	A1	5/2013	Cronenberg et al.	
2013/0245596	A1	9/2013	Cabiri et al.	
2013/0253472	A1	9/2013	Cabiri	
2013/0296799	A1	11/2013	Degtiar et al.	
2013/0304021	A1	11/2013	Cabiri et al.	
2013/0310753	A1	11/2013	Cabiri	
2014/0128815	A1	5/2014	Cabiri et al.	
2014/0207067	A1	7/2014	Kamen et al.	
2014/0330240	A1	11/2014	Cabiri et al.	
2014/0346378	A1	11/2014	Kua et al.	
2014/0350459	A1	11/2014	Lanier, Jr. et al.	
2015/0011965	A1	1/2015	Cabiri	
2015/0157786	A1	6/2015	Sonderegger et al.	
2015/0165121	A1	6/2015	Murakami et al.	
2015/0250943	A1	9/2015	Momose	
2015/0306307	A1	10/2015	Cole et al.	
2015/0359965	A1	12/2015	OConnor et al.	
2016/0058941	A1	3/2016	Wu et al.	
2016/0082184	A1	3/2016	Flanagan et al.	
2016/0121043	A1	5/2016	Weibel	
2016/0256352	A1	9/2016	Bar-El et al.	
2016/0256353	A1	9/2016	Bar-El et al.	
2016/0284239	A1	9/2016	Bergman et al.	
2016/0296699	A1	10/2016	Cabiri	
2016/0296716	A1	10/2016	Cabiri et al.	
2016/0317738	A1 *	11/2016	Cross	A61M 5/1454
2017/0021137	A1 *	1/2017	Cole	A61M 25/0606
2017/0028132	A1	2/2017	Cronenberg et al.	
2017/0340827	A1 *	11/2017	Nazzaro	A61M 5/28

FOREIGN PATENT DOCUMENTS

KR	30-0689248	S	4/2013
WO	WO2011090956	A2	7/2011
WO	WO2012032411	A2	3/2012
WO	WO2014081411	A1	5/2014
WO	WO2016196934	A1	12/2016

OTHER PUBLICATIONS

Amgen Inc., "The Neulasta Onpro Kit", http://www.neulastahcp.com/neulasta-onpro/, Copyright 2016, 16 pages.

BD Worldwide, "Self-Injection Systems", http://www.bd.com/pharmaceuticals/products/self-injection/patch-injectors.asp, Copyright 2017, 2 pages.

OndrugDelivery, "Wearable Injectors", Sep. 19, 2016 Issue No. 70, 48 pages.

Sensile Medical AG, "SensePatch", https://www.sensile-medical.com/assets/data-sheet_5002_senspatch.pdf, 2017, 2 pages.

Unilife Corporation, "Wearable Injectors", http://www.unilife.com/product-platforms/WearableInjectors, Copyright 2016, 3 pages.

West Pharmaceutical Services, Inc. "SmartDose Platform" http://www.westpharma.com/products/self-injection-platforms/smartdoes, Copyright 2017, 3 pages.

* cited by examiner

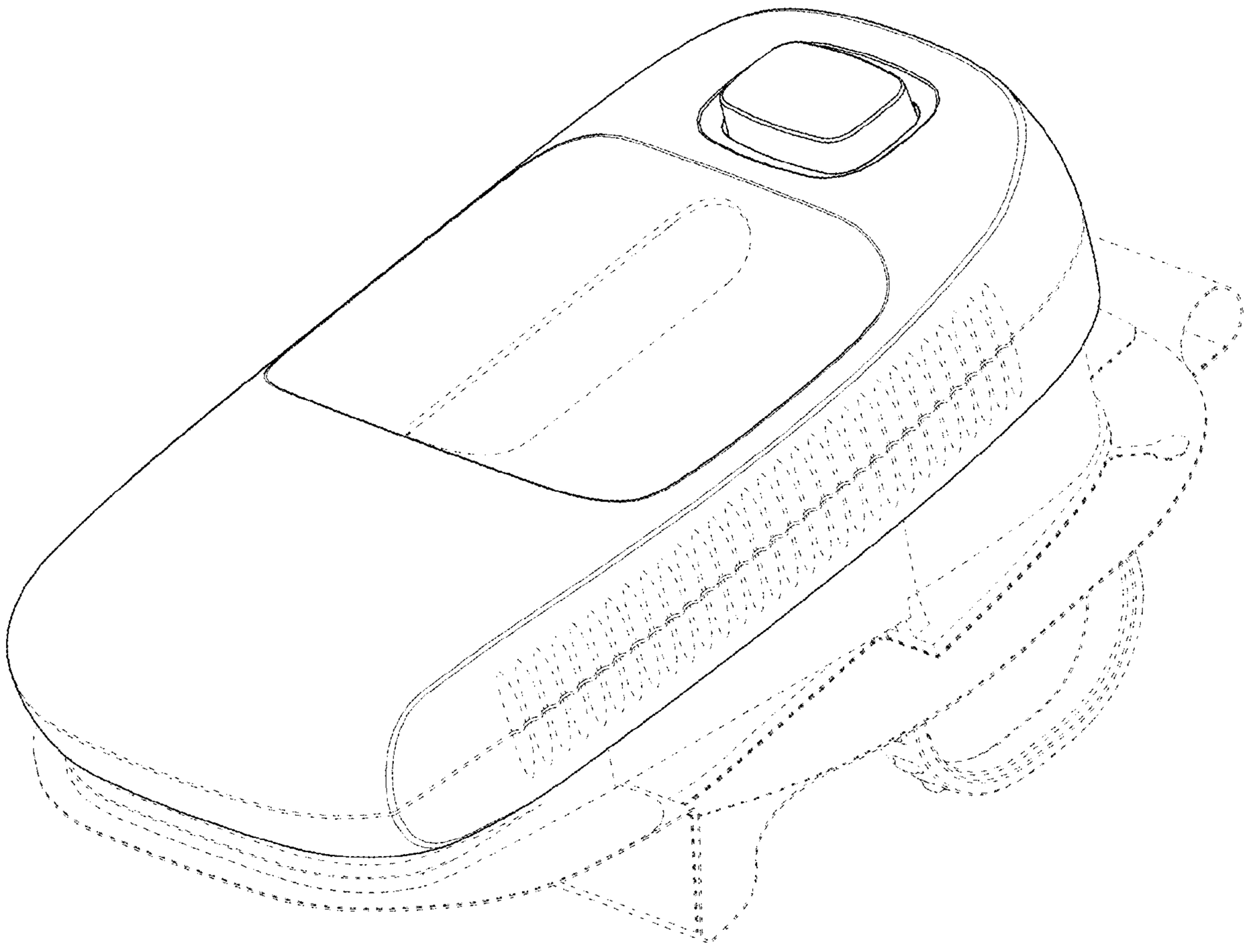


FIG. 1

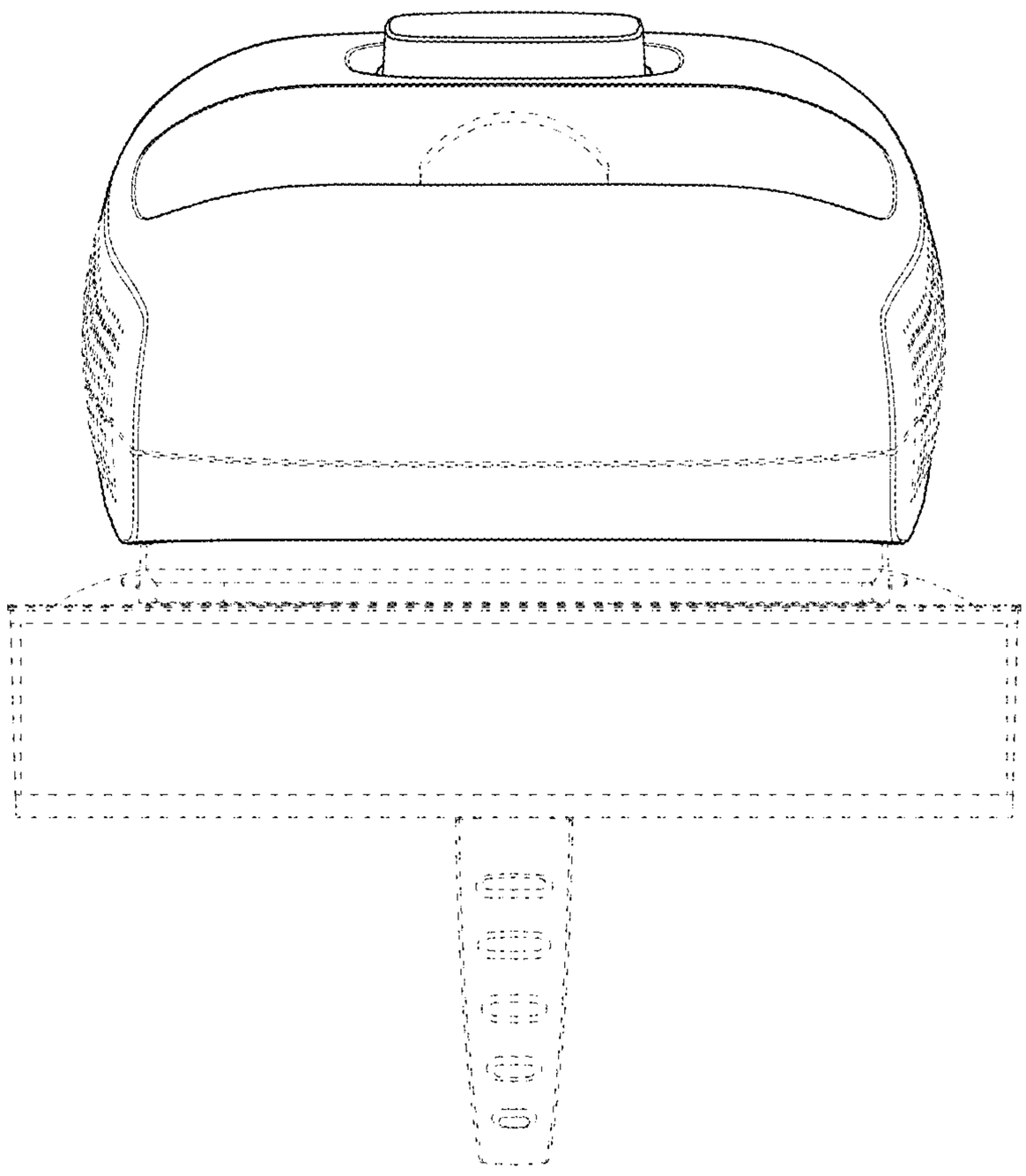


FIG. 2

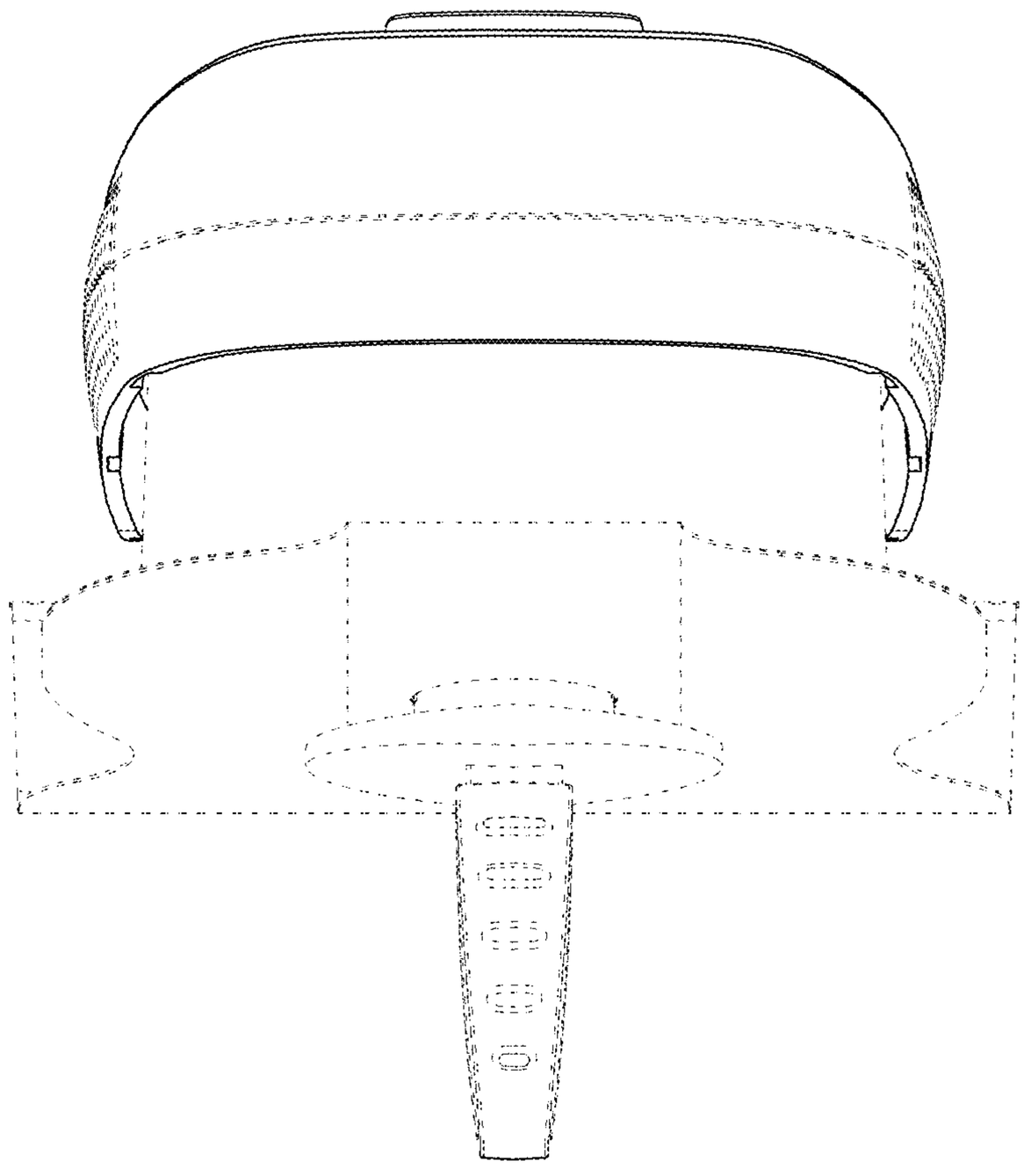


FIG. 3

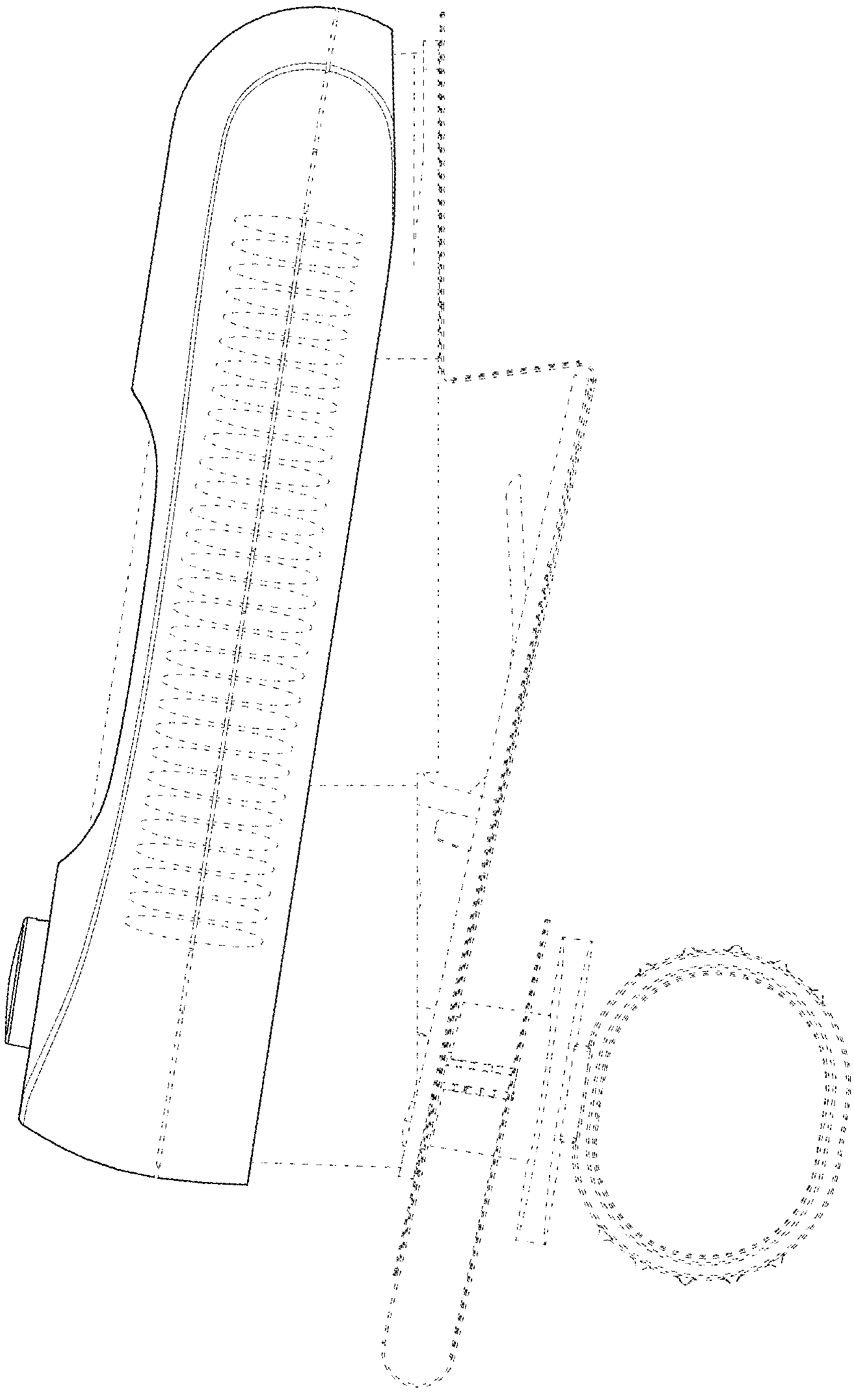


FIG. 4

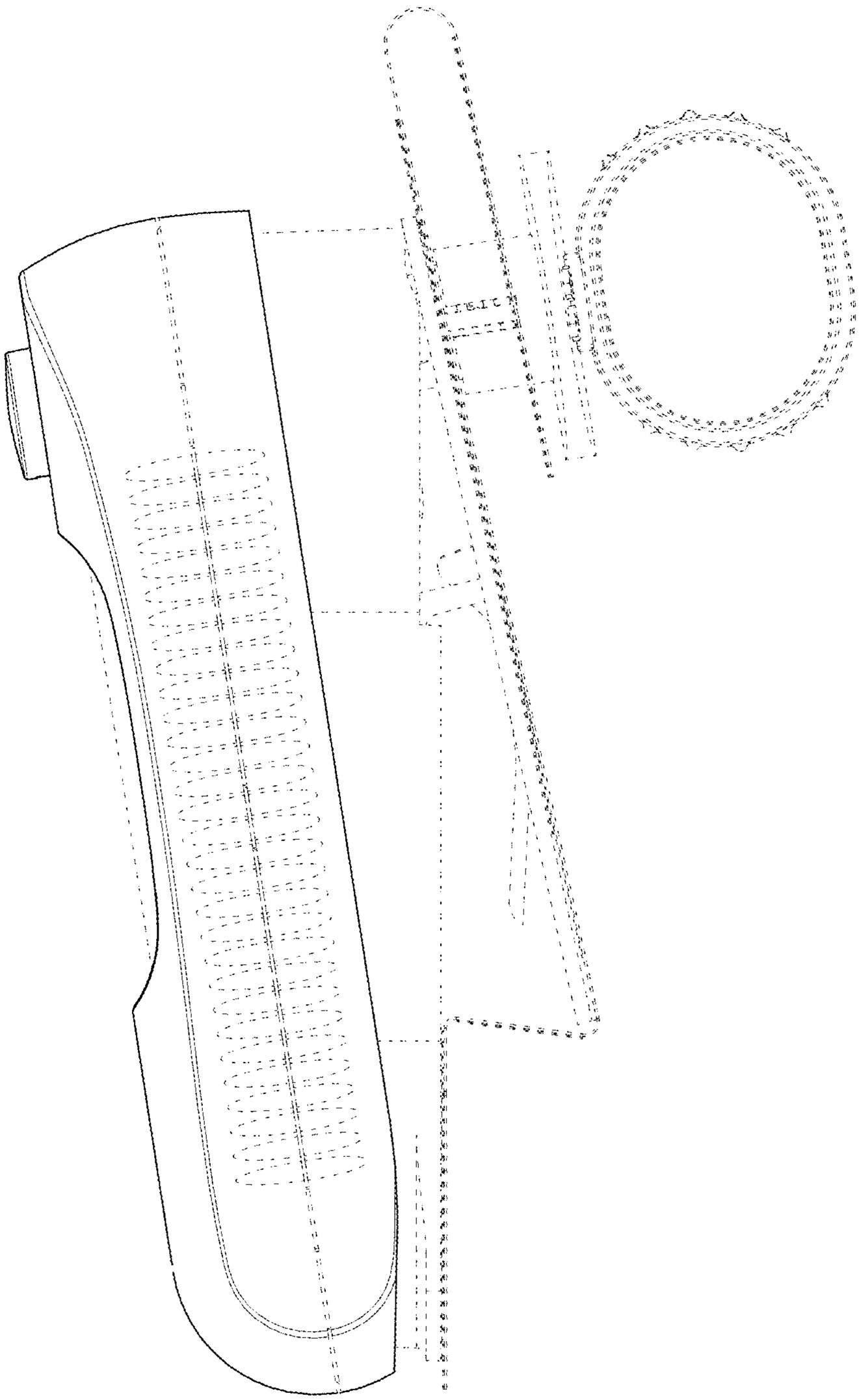


FIG. 5

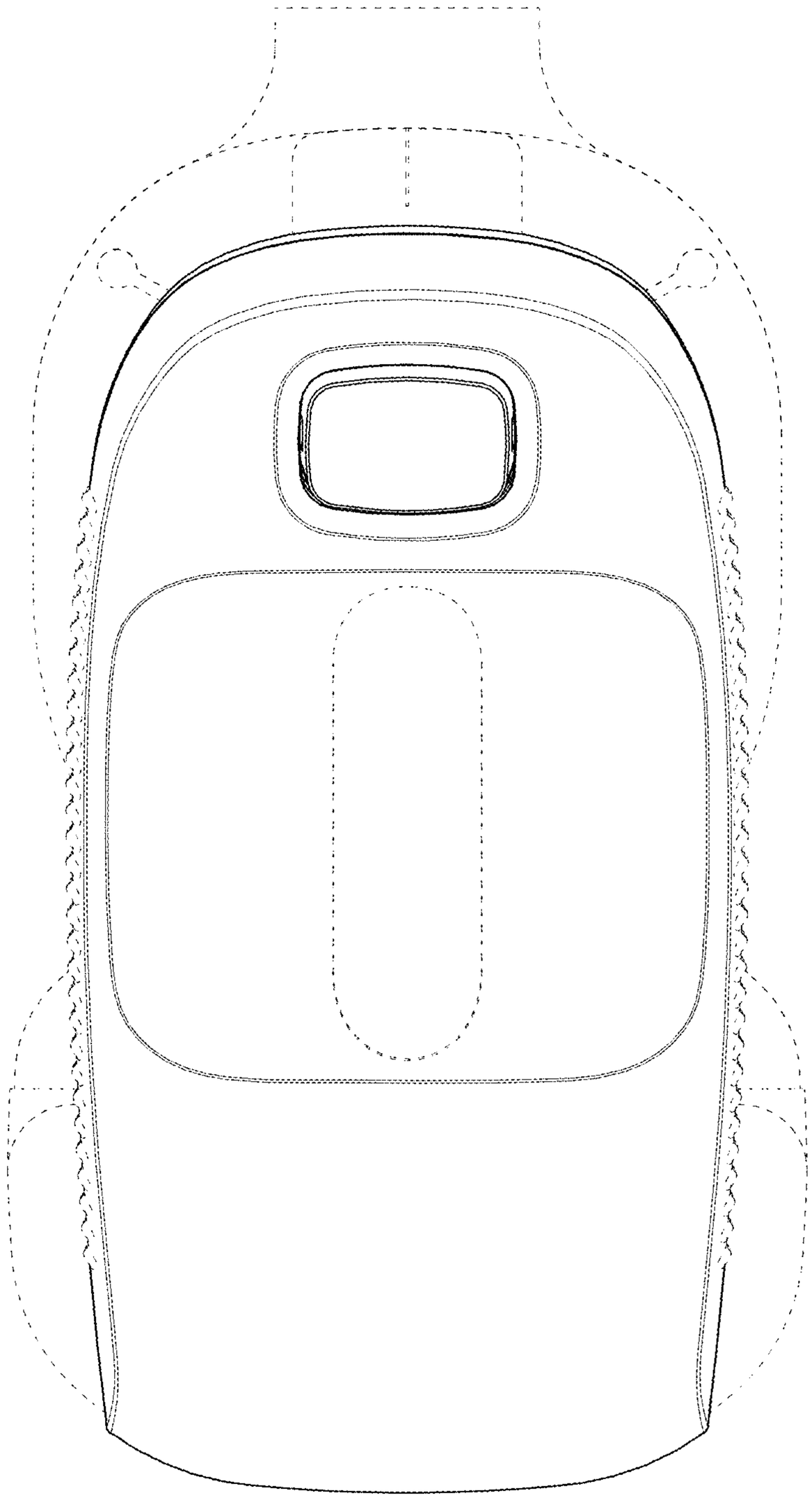


FIG. 6

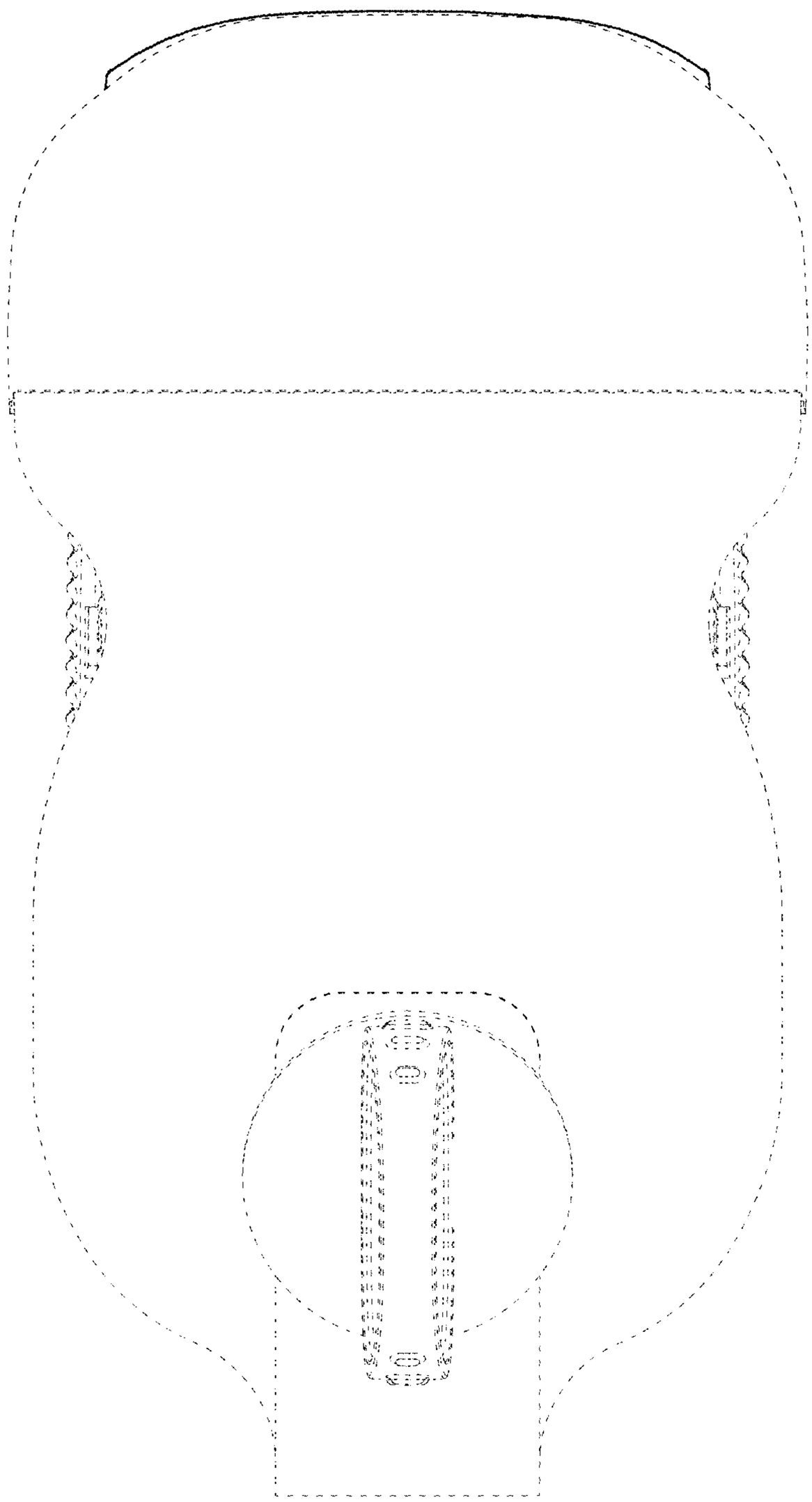


FIG. 7

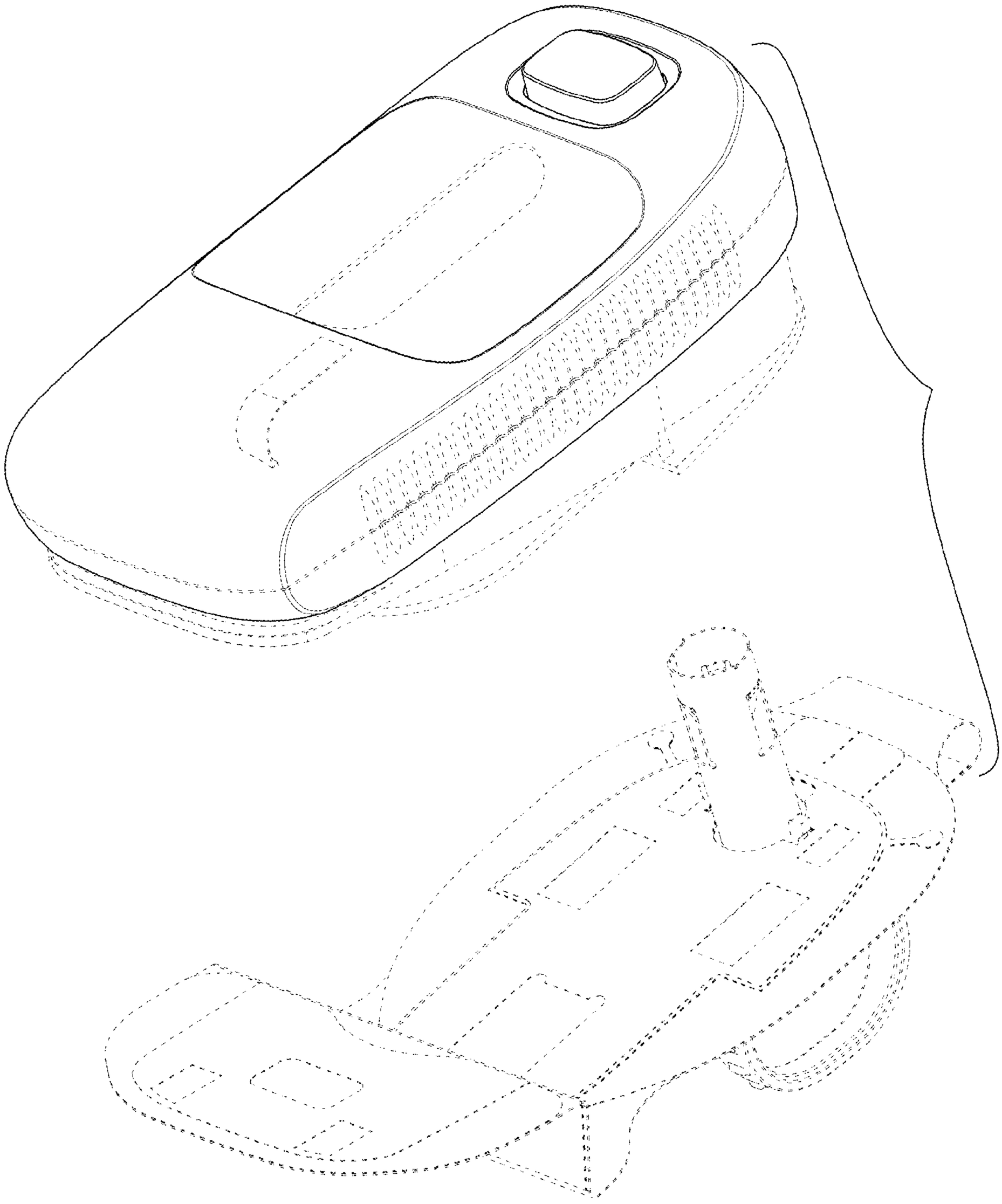


FIG. 8