



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

(10) **Patent No.:** **US D871,283 S**  
(45) **Date of Patent:** **\*\* Dec. 31, 2019**

- (54) **VEHICLE HOOD**
- (71) Applicant: **Oshkosh Corporation**, Oshkosh, WI (US)
- (72) Inventors: **Jesse Gander**, Larsen, WI (US);  
**Christopher Yakes**, Oshkosh, WI (US)
- (73) Assignee: **Oshkosh Corporation**, Oshkosh, WI (US)
- (\*\*) Term: **15 Years**
- (21) Appl. No.: **29/680,745**
- (22) Filed: **Feb. 19, 2019**

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,001,863 A	8/1911	Kirkwood
1,278,460 A	9/1918	Hanger

(Continued)

FOREIGN PATENT DOCUMENTS

CA	2478228 A1	2/2006
DE	11 86 334	1/1965

(Continued)

OTHER PUBLICATIONS

U.S. Appl. No. 13/629,009, filed Sep. 27, 2012.  
(Continued)

**Related U.S. Application Data**

- (63) Continuation of application No. 29/621,958, filed on Oct. 12, 2017, now Pat. No. Des. 843,281, which is a continuation of application No. 14/612,100, filed on Feb. 2, 2015, now Pat. No. 9,829,282, which is a continuation of application No. 13/629,009, filed on Sep. 27, 2012, now Pat. No. 8,943,946, said application No. 29/621,958 is a continuation of application No. 15/599,174, filed on May 18, 2017, which is a continuation of application No. 14/724,279, filed on May 28, 2015, now Pat. No. 9,656,640, which is a continuation of application No.  
(Continued)

*Primary Examiner* — Susan Bennett Hattan  
*Assistant Examiner* — Suzanne E Tisdell  
(74) *Attorney, Agent, or Firm* — Foley & Lardner LLP

(57) **CLAIM**

We claim the ornamental design for a vehicle hood, as shown and described.

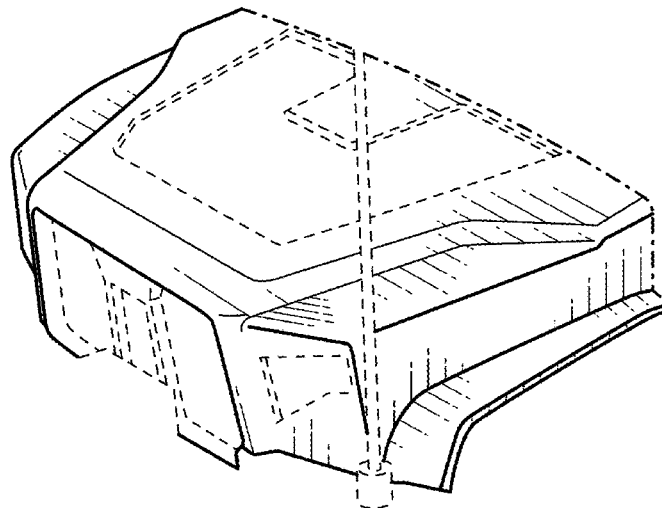
**DESCRIPTION**

FIG. 1 is a front perspective view of the claimed design; FIG. 2 is a front view of the claimed design; FIG. 3 is a rear view of the claimed design; FIG. 4 is a left side view of the claimed design; FIG. 5 is a right side view of the claimed design; FIG. 6 is a top view of the claimed design; FIG. 7 is a bottom view of the claimed design; FIG. 8 is a detailed front perspective view of the claimed design; and, FIG. 9 is a second front perspective view of the claimed design. Evenly-spaced broken lines depict unclaimed environmental subject matter. Dash-dot broken lines depict unclaimed boundaries of the claimed design.

- (51) **LOC (12) Cl.** ..... **16-16**
- (52) **U.S. Cl.**  
USPC ..... **D12/173**
- (58) **Field of Classification Search**  
USPC .... D12/86, 91, 93, 163, 164, 165, 166, 167, D12/169, 171, 172, 173, 190, 216  
CPC ..... B60R 9/06; B60R 19/02; B60R 19/04; B60R 19/18; B60R 19/44; B60R 19/48; B62D 35/02; B62D 39/00; B62D 65/16; B62D 21/12; B29C 45/16

See application file for complete search history.

**1 Claim, 9 Drawing Sheets**



**Related U.S. Application Data**

13/841,686, filed on Mar. 15, 2013, now Pat. No.  
9,045,014.

(56)

**References Cited**

## U.S. PATENT DOCUMENTS

1,376,467 A	5/1921	Simmon	5,143,326 A	9/1992	Parks
1,463,569 A	7/1923	Bathrick	5,158,614 A	10/1992	Takeuchi
1,835,132 A	12/1931	Anania	5,169,197 A	12/1992	Underbakke et al.
1,941,582 A	1/1934	Schroeder	5,209,003 A	5/1993	Maxfield et al.
2,628,127 A	2/1953	Palsgrove	5,211,245 A	5/1993	Relyea et al.
2,632,577 A	3/1953	Sacco	5,217,083 A	6/1993	Bachhuber et al.
2,907,575 A	10/1959	Locker	5,301,756 A	4/1994	Relyea et al.
2,915,334 A	12/1959	Barenzyi	5,322,321 A	6/1994	Yopp
2,916,997 A	12/1959	Terrie	5,327,989 A	7/1994	Furuhashi et al.
2,997,242 A	8/1961	Grosholz	5,346,334 A	9/1994	Einaru et al.
3,010,533 A	11/1961	Ross	5,368,317 A	11/1994	McCombs et al.
3,021,166 A	2/1962	Kempel et al.	5,390,945 A	2/1995	Orr
3,039,788 A	6/1962	Farago	5,438,908 A	8/1995	Madden, Jr.
3,046,045 A	7/1962	Campbell	5,467,827 A	11/1995	McLoughlin
3,083,790 A	4/1963	McAfee et al.	5,487,323 A	1/1996	Madden, Jr.
3,131,963 A	5/1964	Schilberg	5,501,288 A	3/1996	Ducote
3,146,839 A	9/1964	Carlson	5,533,781 A	7/1996	Williams
3,188,966 A	6/1965	Tetlow	5,538,185 A	7/1996	Rabitsch et al.
3,306,390 A	2/1967	Jamme	5,538,274 A	7/1996	Schmitz et al.
3,395,672 A	8/1968	Ruf	5,553,673 A	9/1996	Hackman
3,500,961 A	3/1970	Eberhardt et al.	5,617,696 A	4/1997	Young
3,590,948 A	7/1971	Milner, Jr.	5,663,520 A	9/1997	Ladika et al.
3,726,308 A	4/1973	Eberhardt	5,670,734 A	9/1997	Middione et al.
3,881,767 A	5/1975	Klees	5,679,918 A	10/1997	Korpi et al.
4,037,664 A	7/1977	Gibson	5,687,669 A	11/1997	Engler
4,059,170 A	11/1977	Young	5,716,066 A	2/1998	Chou et al.
4,084,522 A	4/1978	Younger	5,746,396 A	5/1998	Thorton-Trump
4,103,757 A	8/1978	McVaugh	5,752,862 A	5/1998	Mohler et al.
4,153,262 A	5/1979	Diamond et al.	5,785,372 A	7/1998	Glatzmeier et al.
4,157,733 A	6/1979	Ewers et al.	5,788,158 A	8/1998	Relyea
4,160,492 A	7/1979	Johnston	5,794,966 A	8/1998	MacLeod
4,185,924 A	1/1980	Graham	5,807,056 A	9/1998	Osborn et al.
4,241,803 A	12/1980	Lauber	5,820,150 A	10/1998	Archer et al.
4,270,771 A	6/1981	Fujii	D400,835 S	11/1998	Le Qument et al.
4,326,445 A	4/1982	Bemiss	5,836,657 A	11/1998	Tilley et al.
4,329,109 A	5/1982	Den Bleyker	5,839,664 A	11/1998	Relyea
4,337,830 A	7/1982	Eberhardt	RE36,196 E	4/1999	Eberhardt
4,369,010 A	1/1983	Ichinose et al.	5,897,123 A	4/1999	Cherney et al.
4,373,600 A	2/1983	Buschbom et al.	5,899,276 A	5/1999	Relyea et al.
4,395,191 A	7/1983	Kaiser	5,900,199 A	5/1999	Dickson et al.
4,456,093 A	6/1984	Finley et al.	5,905,225 A	5/1999	Joynt
4,492,282 A	1/1985	Appelblatt et al.	5,909,780 A	6/1999	De Andrade
4,558,758 A	12/1985	Littman et al.	5,915,728 A	6/1999	Blackburn
4,563,124 A	1/1986	Eskew	5,915,775 A	6/1999	Martin et al.
4,586,743 A	5/1986	Edwards et al.	5,919,240 A	7/1999	Ney et al.
4,587,862 A	5/1986	Hoffman	5,954,364 A	9/1999	Nechushtan
4,655,307 A	4/1987	Lamoureux	6,009,953 A	1/2000	Laskaris et al.
4,659,104 A	4/1987	Tanaka et al.	6,015,155 A	1/2000	Brookes et al.
4,669,744 A	6/1987	Sano et al.	6,036,201 A	3/2000	Pond et al.
4,696,489 A	9/1987	Fujishiro et al.	6,105,984 A	8/2000	Schmitz et al.
4,709,358 A	11/1987	Appling et al.	6,109,684 A	8/2000	Reitnouer
4,733,876 A	3/1988	Heider et al.	6,131,685 A	10/2000	Sakamoto et al.
4,811,804 A	3/1989	Ewers et al.	6,155,351 A	12/2000	Breedlove et al.
4,826,141 A	5/1989	Buma et al.	6,178,746 B1	1/2001	Thoma et al.
4,834,418 A	5/1989	Buma et al.	6,220,532 B1	4/2001	Manon et al.
4,926,954 A	5/1990	Ataka et al.	6,231,466 B1	5/2001	Thoma et al.
4,945,780 A	8/1990	Bosma	6,270,098 B1	8/2001	Heyring et al.
5,004,156 A	4/1991	Montanier	6,270,153 B1	8/2001	Toyao et al.
5,010,971 A	4/1991	Hamada et al.	6,289,995 B1	9/2001	Fuller
5,021,917 A	6/1991	Pike et al.	6,311,795 B1	11/2001	Skotnikov et al.
5,028,088 A	7/1991	Del Monico et al.	6,318,742 B2	11/2001	Franzini
5,040,823 A	8/1991	Lund	6,357,769 B1	3/2002	Omundson et al.
5,054,806 A	10/1991	Chester	6,394,007 B2	5/2002	Lewis et al.
5,076,597 A	12/1991	Korekane et al.	6,394,534 B1	5/2002	Dean
5,080,392 A	1/1992	Bazergui	6,398,236 B1	6/2002	Richardson
5,111,901 A	5/1992	Bachhuber et al.	6,398,478 B2	6/2002	Smith et al.
5,113,946 A	5/1992	Cooper	6,421,593 B1	7/2002	Kempen et al.
5,137,101 A	8/1992	Schaeff	6,435,071 B1	8/2002	Campbell
5,137,292 A	8/1992	Eisen	6,435,298 B1	8/2002	Mizuno et al.
5,139,104 A	8/1992	Moscicki	6,443,687 B1	9/2002	Kaiser
			6,460,907 B2	10/2002	Usui
			6,503,035 B1	1/2003	Perrott
			6,516,914 B1	2/2003	Andersen et al.
			6,520,494 B1	2/2003	Andersen et al.
			6,527,494 B2	3/2003	Hurlburt
			6,553,290 B1	4/2003	Pillar
			6,561,718 B1	5/2003	Archer et al.
			6,619,673 B2	9/2003	Eckelberry et al.
			6,623,020 B1	9/2003	Satou

(56)

## References Cited

## U.S. PATENT DOCUMENTS

6,658,984	B2	12/2003	Zonak	7,522,979	B2	4/2009	Pillar	
6,692,366	B1	2/2004	Savant	7,555,369	B2	6/2009	Pillar et al.	
6,695,328	B2	2/2004	Cope	7,594,561	B2	9/2009	Hass et al.	
6,702,058	B2	3/2004	Ishii et al.	7,611,153	B2	11/2009	Kim et al.	
6,736,232	B1	5/2004	Bergstrom et al.	7,611,154	B2	11/2009	Delaney	
6,757,597	B2	6/2004	Yakes et al.	7,618,063	B2	11/2009	Takeshima et al.	
6,764,085	B1	7/2004	Anderson	7,624,835	B2	12/2009	Bowers	
6,769,733	B2	8/2004	Seksaria et al.	7,624,995	B2	12/2009	Barbison	
6,779,806	B1	8/2004	Breitbach et al.	7,681,892	B1	3/2010	Crews et al.	
6,820,908	B1	11/2004	Tousi et al.	7,689,332	B2	3/2010	Yakes et al.	
6,848,693	B2	2/2005	Schneider	7,695,053	B1	4/2010	Boczek et al.	
6,860,332	B1	3/2005	Archer et al.	7,699,385	B2	4/2010	Kurata	
6,882,917	B2	4/2005	Pillar et al.	7,711,460	B2	5/2010	Yakes et al.	
6,883,815	B2	4/2005	Archer	7,715,962	B2	5/2010	Rowe et al.	
6,885,920	B2	4/2005	Yakes et al.	7,725,225	B2	5/2010	Pillar et al.	
6,899,191	B1	5/2005	Lykken	7,726,429	B2	6/2010	Suzuki	
6,909,944	B2	6/2005	Pillar et al.	7,729,831	B2	6/2010	Pillar et al.	
6,922,615	B2	7/2005	Pillar et al.	7,756,621	B2	7/2010	Pillar et al.	
6,923,453	B2	8/2005	Pivac	7,757,805	B2	7/2010	Wakuta et al.	
6,925,735	B2	8/2005	Hamm et al.	7,770,506	B2	8/2010	Johnson et al.	
6,959,466	B2	11/2005	Alowonle et al.	7,789,010	B2	9/2010	Allor et al.	
6,976,688	B2	12/2005	Archer et al.	7,792,618	B2	9/2010	Quigley et al.	
6,993,421	B2	1/2006	Pillar et al.	7,802,816	B2	9/2010	McGuire	
7,006,902	B2	2/2006	Archer et al.	D627,686	S *	11/2010	Thompson	D12/91
7,024,296	B2	4/2006	Squires et al.	7,835,838	B2	11/2010	Pillar et al.	
7,072,745	B2	7/2006	Pillar et al.	7,848,857	B2	12/2010	Nasr et al.	
7,073,620	B2	7/2006	Braun et al.	7,905,534	B2	3/2011	Boczek et al.	
7,107,129	B2	9/2006	Rowe et al.	7,905,540	B2	3/2011	Kiley et al.	
7,114,764	B1	10/2006	Barsoum et al.	7,908,959	B2	3/2011	Pavon	
7,127,331	B2	10/2006	Pillar et al.	D636,305	S	4/2011	Alvarez et al.	
D533,485	S	12/2006	Schiavone et al.	7,931,103	B2	4/2011	Morrow et al.	
7,144,039	B2	12/2006	Kawasaki et al.	7,934,766	B2	5/2011	Boczek et al.	
D535,589	S	1/2007	Lau et al.	7,938,478	B2	5/2011	Kamimae	
7,162,332	B2	1/2007	Pillar et al.	D642,099	S	7/2011	Nagao et al.	
7,164,977	B2	1/2007	Yakes et al.	7,997,182	B1	8/2011	Cox	
7,184,662	B2	2/2007	Arbel et al.	8,000,850	B2	8/2011	Nasr et al.	
7,184,862	B2	2/2007	Pillar et al.	D646,203	S *	10/2011	Thompson	D12/91
7,184,866	B2	2/2007	Squires et al.	D646,607	S *	10/2011	Verhee	D12/169
7,188,893	B2	3/2007	Akasaka	8,029,021	B2	10/2011	Leonard et al.	
7,198,130	B2	4/2007	Schimke	8,033,208	B2	10/2011	Joynt et al.	
7,198,278	B2	4/2007	Donaldson	D649,908	S *	12/2011	Mullen	D12/86
7,207,582	B2	4/2007	Siebers et al.	D649,909	S *	12/2011	Mullen	D12/86
7,213,872	B2	5/2007	Ronacher et al.	8,095,247	B2	1/2012	Pillar et al.	
7,234,534	B2	6/2007	Froland et al.	8,096,225	B1	1/2012	Johnson et al.	
7,240,906	B2	7/2007	Klees	D655,226	S	3/2012	Hanson et al.	
7,246,835	B1	7/2007	Colburn et al.	8,139,109	B2	3/2012	Schmiedel et al.	
7,254,468	B2	8/2007	Pillar et al.	8,146,477	B2	4/2012	Joynt	
7,258,194	B2	8/2007	Braun et al.	8,146,478	B2	4/2012	Joynt et al.	
7,267,394	B1	9/2007	Mouch et al.	D661,231	S *	6/2012	Galante	D12/163
7,270,346	B2	9/2007	Rowe et al.	8,205,703	B2	6/2012	Halliday	
7,274,976	B2	9/2007	Rowe et al.	D662,865	S	7/2012	Van Braeckel	
7,277,782	B2	10/2007	Yakes et al.	8,333,390	B2	12/2012	Linsmeier et al.	
7,281,600	B2	10/2007	Chernoff et al.	8,347,775	B2	1/2013	Altenhof et al.	
7,302,320	B2	11/2007	Nasr et al.	8,376,077	B2	2/2013	Venton-Walters	
7,306,069	B2	12/2007	Takeshima et al.	8,402,878	B2	3/2013	Schreiner et al.	
7,329,161	B2	2/2008	Roering	8,413,567	B2	4/2013	Luther et al.	
7,357,203	B2	4/2008	Morrow et al.	8,413,568	B2	4/2013	Kosheleff	
7,377,549	B2	5/2008	Hasegawa et al.	8,424,443	B2	4/2013	Gonzalez	
7,379,797	B2	5/2008	Nasr et al.	8,430,196	B2	4/2013	Halliday	
7,380,800	B2	6/2008	Klees	D683,675	S *	6/2013	Munson	D12/173
7,392,122	B2	6/2008	Pillar et al.	8,459,619	B2	6/2013	Trinh et al.	
7,393,016	B2	7/2008	Mitsui et al.	8,465,025	B2	6/2013	Venton-Walters et al.	
7,406,909	B2	8/2008	Shah et al.	D686,121	S *	7/2013	McCabe	D12/173
7,412,307	B2	8/2008	Pillar et al.	8,561,735	B2	10/2013	Morrow et al.	
7,419,021	B2	9/2008	Morrow et al.	8,578,834	B2	11/2013	Tunis et al.	
7,425,891	B2	9/2008	Colburn et al.	8,596,183	B2	12/2013	Coltrane	
7,439,711	B2	10/2008	Bolton	8,596,648	B2	12/2013	Venton-Walters et al.	
7,441,615	B2	10/2008	Borroni-Bird et al.	8,601,931	B2	12/2013	Naroditsky et al.	
7,441,809	B1	10/2008	Coombs et al.	8,616,617	B2	12/2013	Sherbeck et al.	
7,448,460	B2	11/2008	Morrow et al.	D698,281	S	1/2014	Badstuebner et al.	
7,451,028	B2	11/2008	Pillar et al.	D702,615	S	4/2014	Conway et al.	
7,472,914	B2	1/2009	Anderson et al.	8,746,741	B2	6/2014	Gonzalez	
7,472,919	B2	1/2009	Pratt et al.	8,764,029	B2	7/2014	Venton-Walters et al.	
7,510,235	B2	3/2009	Kobayashi et al.	8,801,017	B2	8/2014	Ellifson et al.	
7,520,354	B2	4/2009	Morrow et al.	8,863,884	B2	10/2014	Jacob-Lloyd	
				D718,683	S *	12/2014	Thole	D12/173
				8,905,164	B1	12/2014	Capouellez et al.	
				8,921,130	B2	12/2014	Kundaliya et al.	
				8,943,946	B1	2/2015	Richmond et al.	

(56)

References Cited

U.S. PATENT DOCUMENTS

8,947,531 B2 2/2015 Fischer et al.  
 8,955,859 B1 2/2015 Richmond et al.  
 8,967,699 B1 3/2015 Richmond et al.  
 8,991,834 B2 3/2015 Venton-Walters et al.  
 8,991,840 B2 3/2015 Zuleger et al.  
 9,016,703 B2 4/2015 Rowe et al.  
 9,045,014 B1 6/2015 Verhoff et al.  
 D743,308 S 11/2015 Hanson et al.  
 D743,856 S 11/2015 Ma  
 9,174,686 B1 11/2015 Messina et al.  
 9,221,496 B2 12/2015 Barr et al.  
 D749,464 S 2/2016 Giolito  
 9,328,986 B1 5/2016 Pennau et al.  
 9,409,471 B2 8/2016 Hoppe et al.  
 D765,566 S 9/2016 Vena et al.  
 D775,021 S \* 12/2016 Harriton ..... D12/173  
 D777,615 S 1/2017 Hanson et al.  
 D778,217 S \* 2/2017 Ito ..... D12/173  
 D784,219 S \* 4/2017 Jung ..... D12/173  
 D787,993 S \* 5/2017 McCabe ..... D12/173  
 9,650,005 B2 5/2017 Patelczyk et al.  
 D797,603 S \* 9/2017 Noone ..... D12/91  
 D804,372 S \* 12/2017 Kozub ..... D12/173  
 D813,757 S \* 3/2018 Kozub ..... D12/173  
 D813,758 S \* 3/2018 Gonzales ..... D12/173  
 D815,574 S \* 4/2018 Mainville ..... D12/173  
 2001/0015559 A1 8/2001 Storer  
 2002/0129696 A1 9/2002 Pek et al.  
 2002/0130771 A1 9/2002 Osborne et al.  
 2002/0153183 A1 10/2002 Puterbaugh et al.  
 2002/0190516 A1 12/2002 Hensksmeier et al.  
 2003/0001346 A1 1/2003 Hamilton et al.  
 2003/0155164 A1 8/2003 Mantini et al.  
 2004/0113377 A1 6/2004 Klees  
 2004/0130168 A1 7/2004 O'Connell  
 2004/0149500 A1 8/2004 Chernoff et al.  
 2005/0034911 A1 2/2005 Darby  
 2005/0062239 A1 3/2005 Shore  
 2005/0093265 A1 5/2005 Niaura et al.  
 2005/0099885 A1 5/2005 Tamminga  
 2005/0110229 A1 5/2005 Kimura et al.  
 2005/0132873 A1 6/2005 Diaz Supisiche et al.  
 2005/0161891 A1 7/2005 Trudeau et al.  
 2005/0196269 A1 9/2005 Racer et al.  
 2005/0284682 A1 12/2005 Hass et al.  
 2006/0021764 A1 2/2006 Archer et al.  
 2006/0082079 A1 4/2006 Eichhorn et al.  
 2006/0192354 A1 8/2006 Van Cayzeele  
 2006/0244225 A1 11/2006 Power et al.  
 2006/0273566 A1 12/2006 Hepner et al.  
 2007/0088469 A1 4/2007 Schmiedel et al.  
 2007/0102963 A1 5/2007 Frederick et al.  
 2007/0120334 A1 5/2007 Holbrook  
 2007/0145816 A1 6/2007 Gile  
 2007/0158920 A1 7/2007 Delaney  
 2007/0186762 A1 8/2007 Dehart et al.  
 2007/0234896 A1 10/2007 Joynt  
 2007/0246902 A1 10/2007 Trudeau et al.  
 2008/0017426 A1 1/2008 Walters et al.  
 2008/0017434 A1 1/2008 Harper et al.  
 2008/0034953 A1 2/2008 Barbe et al.  
 2008/0053739 A1 3/2008 Chernoff et al.  
 2008/0066613 A1 3/2008 Mills et al.  
 2008/0099213 A1 5/2008 Morrow et al.  
 2008/0252025 A1 10/2008 Plath  
 2008/0284118 A1 11/2008 Venton-Walters et al.  
 2009/0001761 A1 1/2009 Yasuhara et al.  
 2009/0061702 A1 3/2009 March

2009/0174158 A1 7/2009 Anderson et al.  
 2010/0019538 A1 1/2010 Kiley et al.  
 2010/0026046 A1 2/2010 Mendoza et al.  
 2010/0032932 A1 2/2010 Hastings  
 2010/0123324 A1 5/2010 Shoup et al.  
 2010/0163330 A1 7/2010 Halliday  
 2010/0187864 A1 7/2010 Tsuchida  
 2010/0218667 A1 9/2010 Naroditsky et al.  
 2010/0264636 A1 10/2010 Fausch et al.  
 2010/0307328 A1 12/2010 Hoadley et al.  
 2010/0307329 A1 12/2010 Kaswen et al.  
 2010/0319525 A1 12/2010 Pavon  
 2011/0068606 A1 3/2011 Klimek et al.  
 2011/0079134 A1 4/2011 Jacquemont et al.  
 2011/0079978 A1 4/2011 Schreiner et al.  
 2011/0114409 A1 5/2011 Venton-Walters  
 2011/0120791 A1 \* 5/2011 Greenwood ..... B60K 11/04  
 180/68.1  
 2011/0266838 A1 11/2011 Leopold  
 2011/0291444 A1 12/2011 Ische  
 2011/0314999 A1 12/2011 Luther et al.  
 2012/0049570 A1 3/2012 Aizik  
 2012/0097019 A1 4/2012 Sherbeck et al.  
 2012/0111180 A1 5/2012 Johnson et al.  
 2012/0174767 A1 7/2012 Naroditsky et al.  
 2012/0181100 A1 7/2012 Halliday  
 2012/0193940 A1 8/2012 Tunis et al.  
 2013/0009423 A1 1/2013 Yamamoto et al.  
 2013/0093154 A1 4/2013 Cordier et al.  
 2013/0153314 A1 6/2013 Niedzwiecki  
 2013/0205984 A1 8/2013 Henker et al.  
 2013/0241237 A1 9/2013 Dziuba et al.  
 2013/0263729 A1 10/2013 Johnson et al.  
 2013/0312595 A1 11/2013 Lee  
 2014/0035325 A1 2/2014 Naito et al.  
 2014/0060304 A1 3/2014 Harmon et al.  
 2014/0151142 A1 6/2014 Hoppe et al.  
 2014/0262591 A1 9/2014 Turner et al.  
 2015/0224847 A1 8/2015 Rowe et al.  
 2015/0283889 A1 10/2015 Agnew  
 2016/0047631 A1 2/2016 Berman  
 2016/0257360 A1 9/2016 MacKenzie et al.  
 2017/0328054 A1 11/2017 Bakken  
 2018/0326843 A1 11/2018 Danielson et al.

FOREIGN PATENT DOCUMENTS

DE 36 20 603 A1 1/1987  
 EP 0 685 382 12/1995  
 EP 1 371 391 B1 12/2009  
 FR 1471914 3/1967  
 FR 2380176 9/1978  
 GB 2 168 015 A0 6/1986  
 JP 4230421 8/1992  
 JP 06-037090 5/1994  
 JP 2005-007995 1/2005  
 JP 2005-212698 8/2005  
 JP 2006-056463 3/2006  
 WO WO-01/76912 A1 10/2001  
 WO WO-03/049987 A2 6/2003  
 WO WO-2007/140179 A2 12/2007

OTHER PUBLICATIONS

U.S. Appl. No. 14/612,100, filed Feb. 2, 2015.  
 U.S. Appl. No. 13/841,686, filed Mar. 15, 2013.  
 U.S. Appl. No. 14/724,279, filed May 28, 2015.  
 U.S. Appl. No. 15/599,174, filed May 18, 2017.  
 U.S. Appl. No. 29/621,958, filed Oct. 12, 2017.

\* cited by examiner

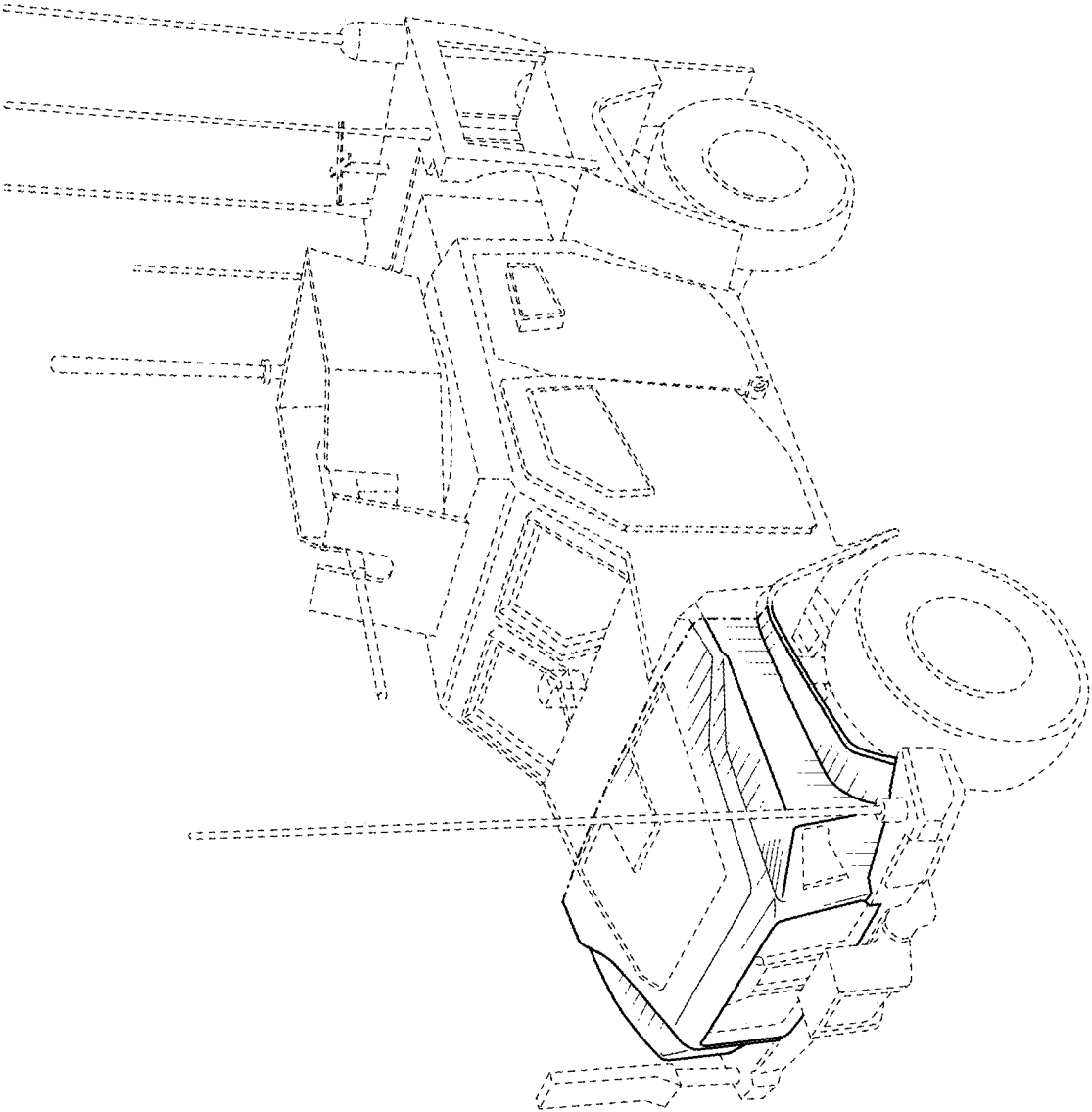


FIG. 1

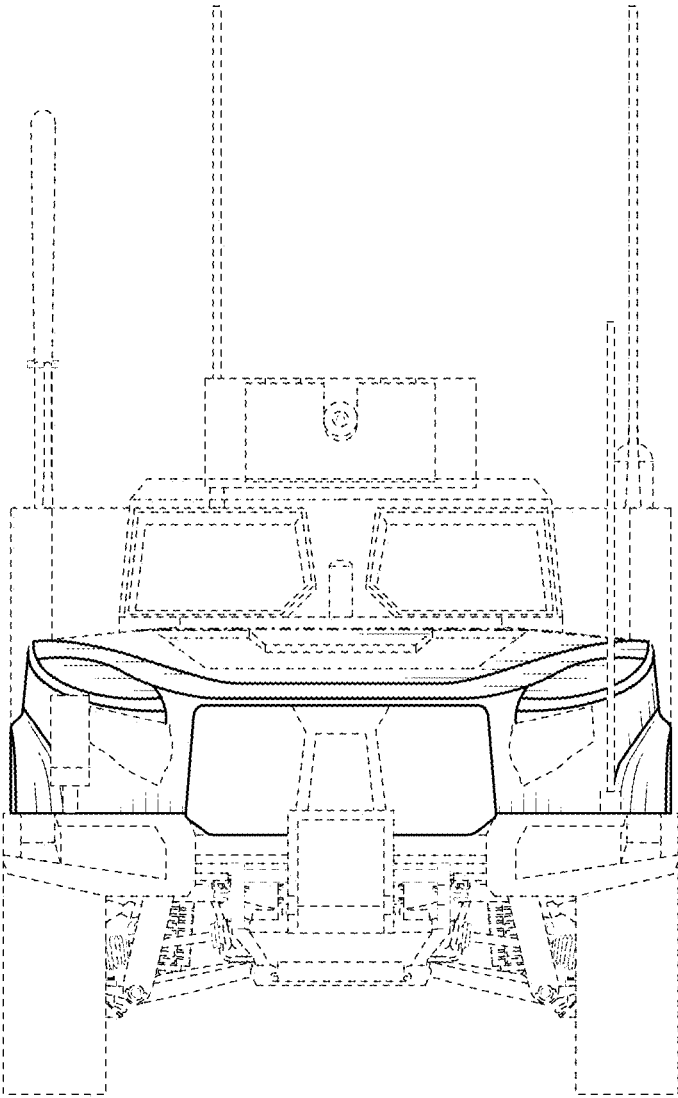


FIG. 2

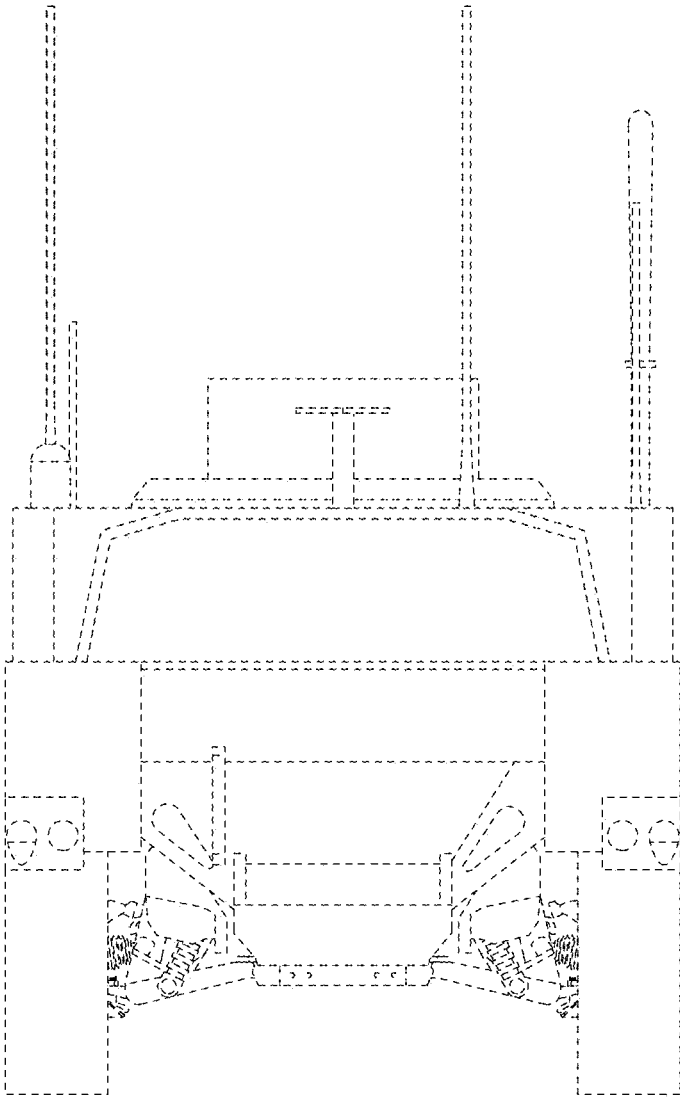


FIG. 3

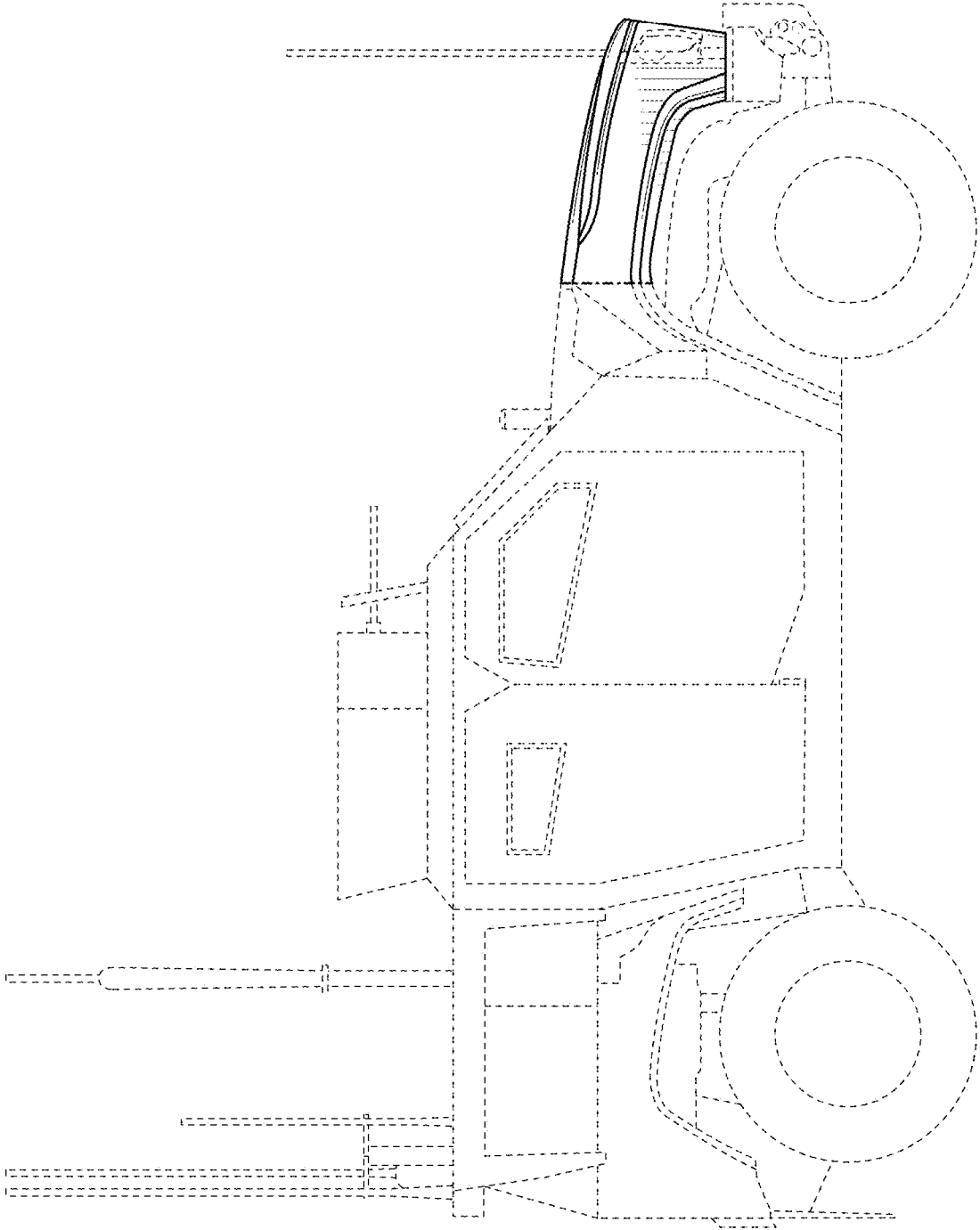


FIG. 4



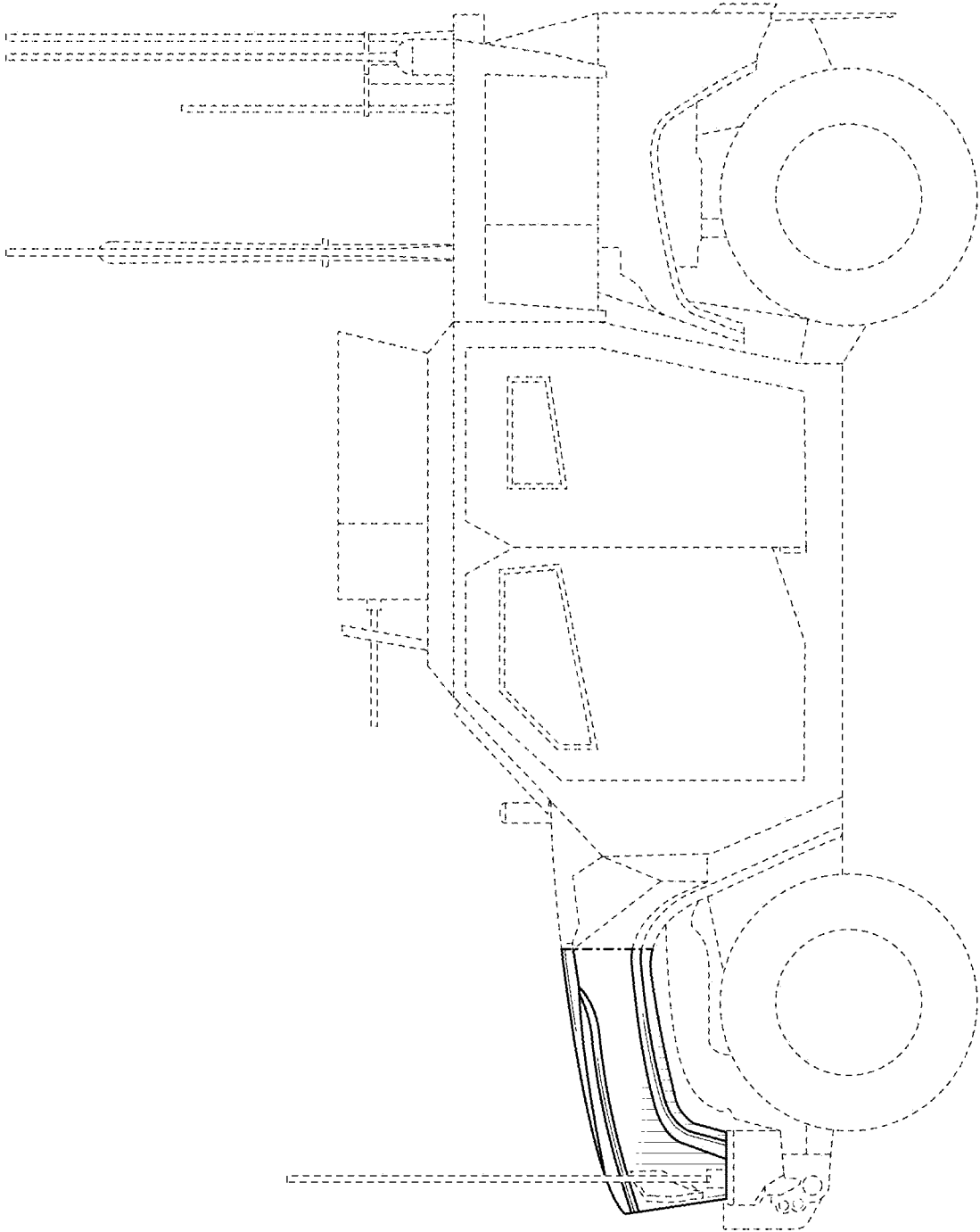


FIG. 5

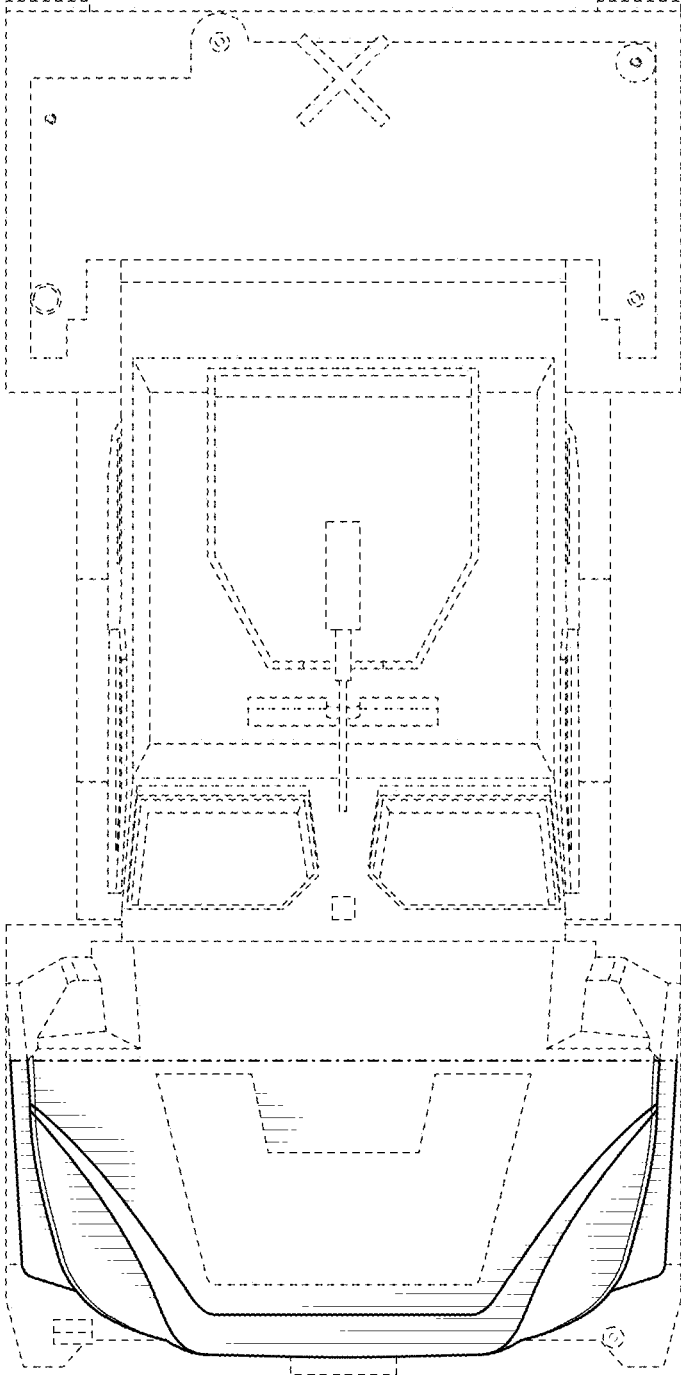


FIG. 6

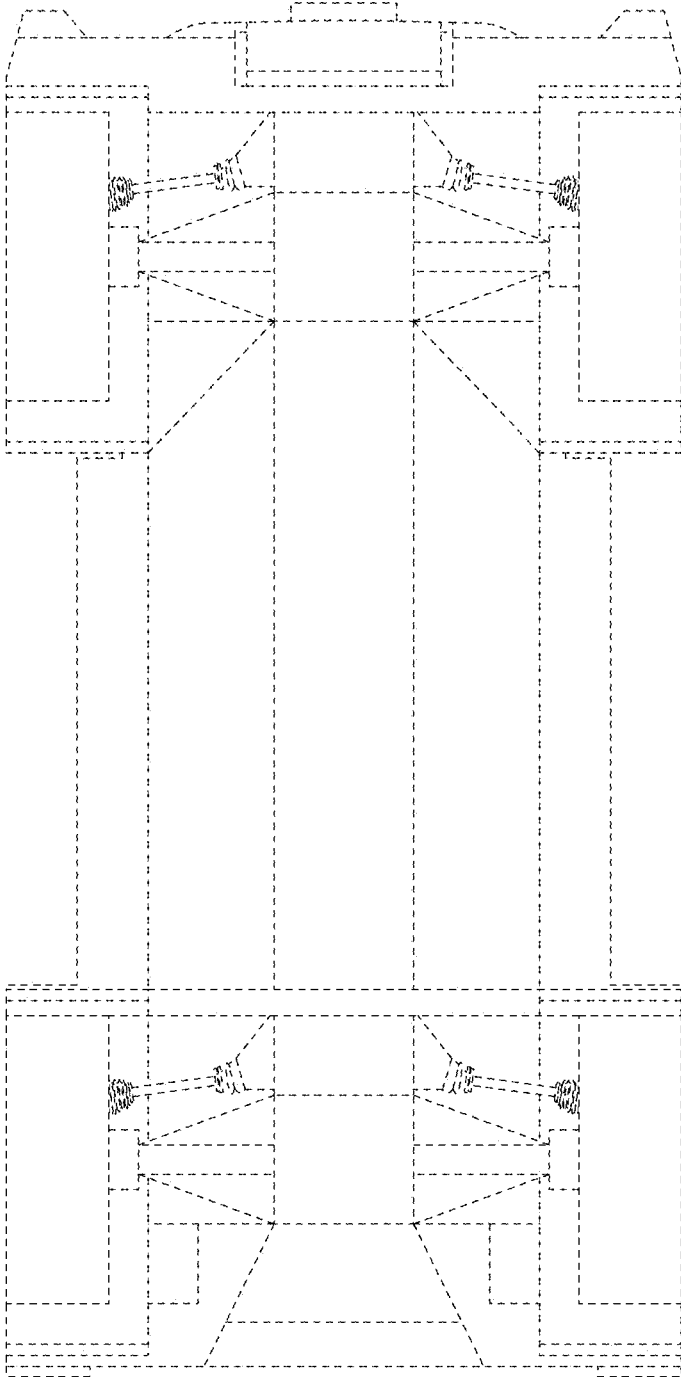


FIG. 7

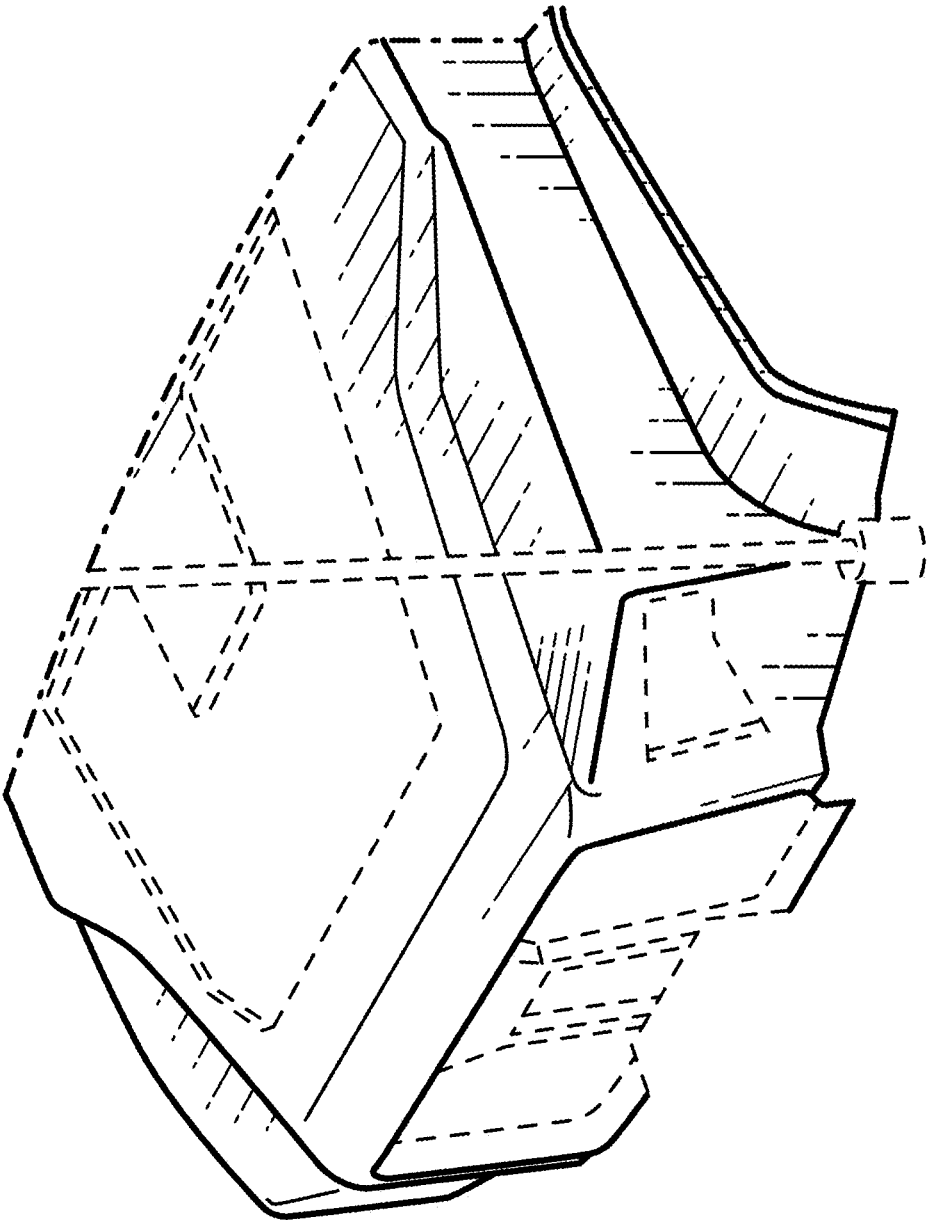


FIG. 8

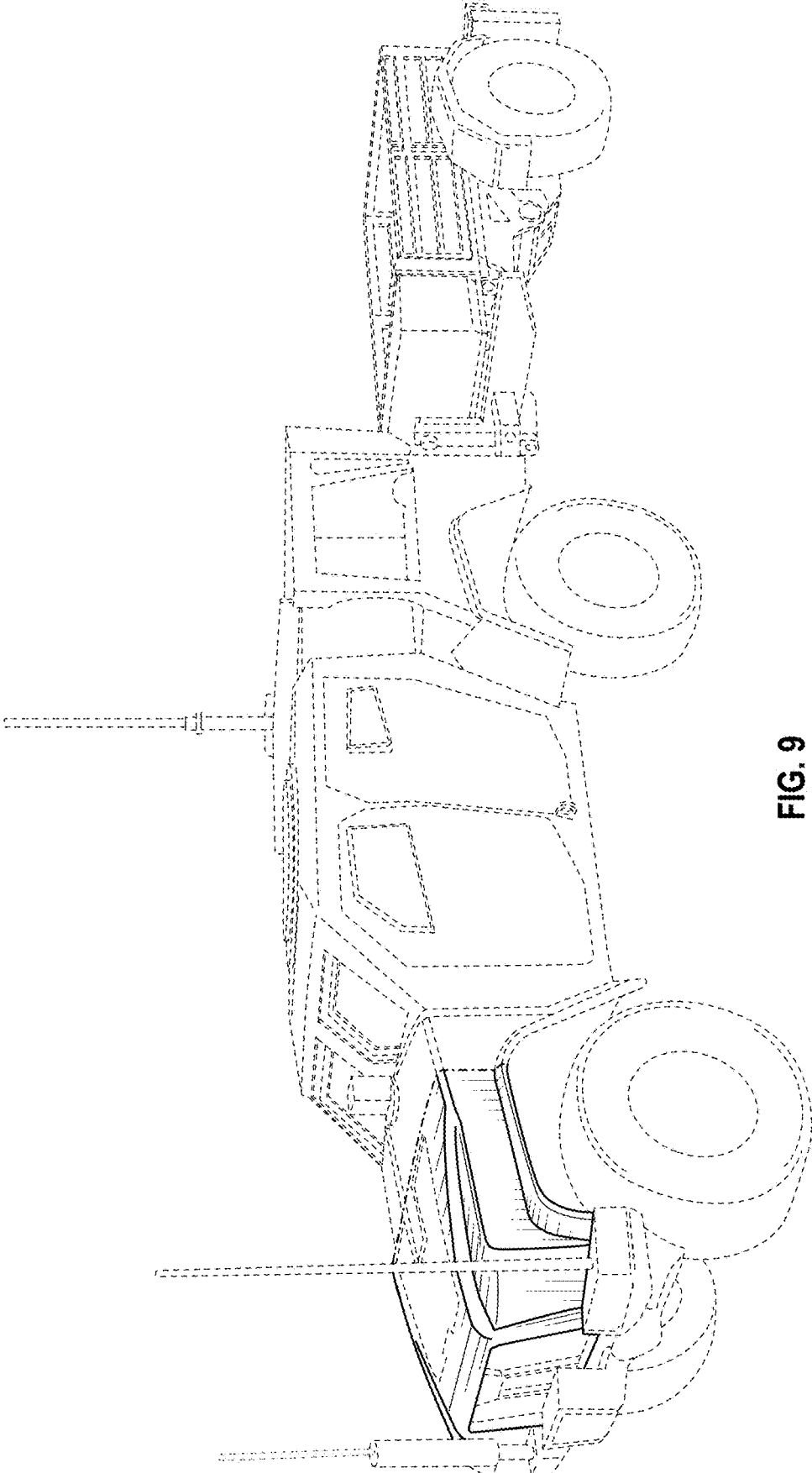


FIG. 9