

US00D978036S

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

(10) **Patent No.:** **US D978,036 S**

(45) **Date of Patent:** **\*\* Feb. 14, 2023**

- (54) **VEHICLE REAR BUMPER**
- (71) Applicant: **GM GLOBAL TECHNOLOGY OPERATIONS LLC**, Detroit, MI (US)
- (72) Inventors: **Hojun Choi**, Seoul (KR); **Minseon Park**, Gwangmyeong-si (KR); **Dongwan Jo**, Incheon (KR)
- (73) Assignee: **GM Global Technology Operations LLC**, Detroit, MI (US)
- (\*\*) Term: **15 Years**
- (21) Appl. No.: **29/805,391**
- (22) Filed: **Aug. 26, 2021**
- (51) **LOC (14) Cl.** ..... **12-16**
- (52) **U.S. Cl.**  
USPC ..... **D12/169**
- (58) **Field of Classification Search**  
USPC ..... D12/169, 196, 86, 90-92, 163, 190, 98,  
D12/164; 293/102, 113, 115, 117, 120,  
293/193.11; 296/180.1, 180.2  
CPC ..... B60R 19/02; B60R 19/04; B62D 25/08  
See application file for complete search history.

- D758,271 S 6/2016 McMahan et al.
- D767,454 S 9/2016 McMahan et al.
- D767,459 S 9/2016 Kim
- D767,461 S 9/2016 Kozub et al.
- D776,021 S 1/2017 Kapitonov
- D776,581 S 1/2017 Pevovar et al.
- D778,212 S 2/2017 Kozub et al.
- D780,077 S 2/2017 Kim et al.
- D783,482 S 4/2017 Smith et al.
- D784,886 S 4/2017 Smith et al.
- D787,989 S 5/2017 Kozub et al.
- D788,001 S 5/2017 Lee
- D789,575 S 6/2017 Willett
- D789,849 S 6/2017 Lee
- D792,294 S 7/2017 McCabe et al.
- D793,294 S 8/2017 Lee
- D793,295 S 8/2017 McCabe et al.
- D793,299 S 8/2017 Krieg et al.
- D793,300 S 8/2017 Krieg et al.
- D797,616 S 9/2017 Lee
- D797,631 S 9/2017 Pevovar et al.
- D797,632 S 9/2017 Zipfel et al.

(Continued)

Primary Examiner — Melody N Brown

(57) **CLAIM**

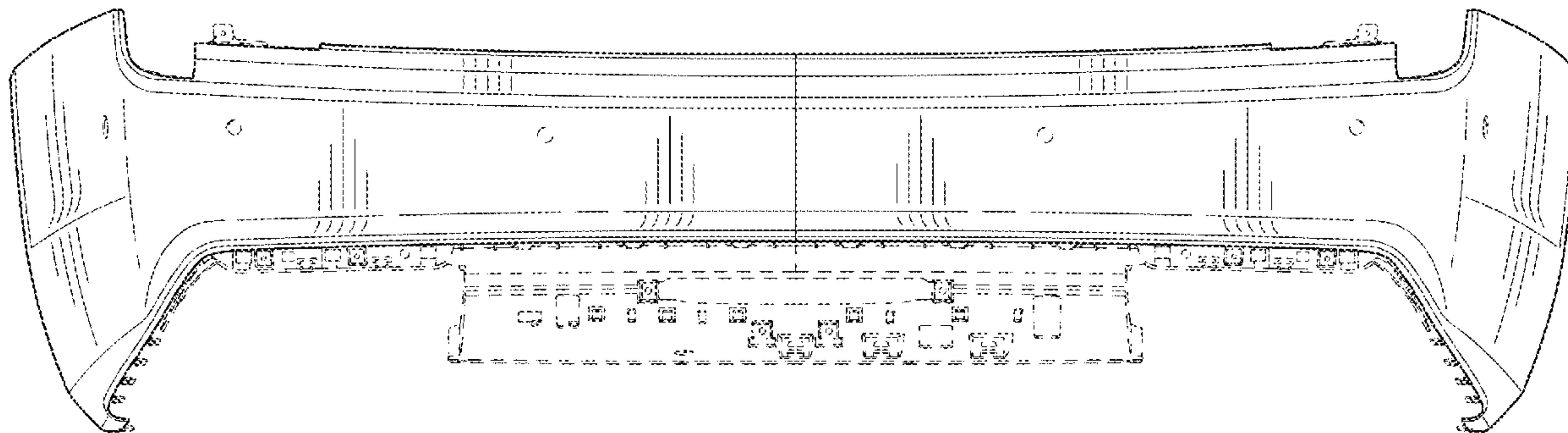
The ornamental design for a vehicle rear bumper, as shown and described.

**DESCRIPTION**

FIG. 1 is a front and left side perspective view of a vehicle rear bumper showing our new design;  
 FIG. 2 is a front elevational view thereof;  
 FIG. 3 is a right side elevational view thereof;  
 FIG. 4 is a left side elevational view thereof;  
 FIG. 5 is a top plan view thereof;  
 FIG. 6 is a rear elevational thereof; and,  
 FIG. 7 is a bottom plan view thereof.  
 The broken lines in the drawings depict portions of the vehicle rear bumper that form no part of the claimed design.

**1 Claim, 7 Drawing Sheets**

- (56) **References Cited**  
U.S. PATENT DOCUMENTS
- D704,603 S 5/2014 Munson et al.
- D708,994 S 7/2014 Thurber
- D711,294 S 8/2014 Karras et al.
- D733,018 S 6/2015 McCabe et al.
- D743,313 S 11/2015 Smith et al.
- D743,314 S 11/2015 Thole et al.
- D749,997 S 2/2016 McMahan et al.
- D753,032 S 4/2016 Smith et al.
- D753,033 S 4/2016 Thole et al.
- D753,035 S 4/2016 Boniface et al.
- D753,567 S 4/2016 Boniface et al.



(56)

References Cited

U.S. PATENT DOCUMENTS

D801,236 S	10/2017	Kozub et al.	D845,188 S	4/2019	Pinazzo et al.
D801,882 S	11/2017	Kozub et al.	D845,189 S	4/2019	Pinazzo et al.
D801,889 S	11/2017	Han	D846,457 S	4/2019	Koo et al.
D804,370 S	12/2017	Kozub et al.	D846,458 S	4/2019	Mack et al.
D804,371 S	12/2017	Whitla et al.	D847,043 S	4/2019	Kozub
D805,441 S	12/2017	Karras	D847,045 S	4/2019	Whitla et al.
D805,985 S	12/2017	Nakamura	D847,046 S	4/2019	Whitla et al.
D811,958 S	3/2018	Zipfel et al.	D847,047 S	4/2019	Krieg et al.
D811,959 S	3/2018	Perkins	D847,703 S	5/2019	Kozub
D811,961 S	3/2018	Sullivan	D848,909 S	5/2019	Lee
D811,962 S	3/2018	Sullivan	D848,911 S	5/2019	De Leon
D811,963 S	3/2018	Sullivan	D849,627 S	5/2019	Zipfel
D811,965 S	3/2018	Moffett et al.	D849,629 S	5/2019	De Leon
D813,110 S	3/2018	Whitla et al.	D849,630 S	5/2019	De Leon
D813,111 S	3/2018	Sullivan	D851,558 S	6/2019	Thurber et al.
D813,116 S	3/2018	Park	D851,559 S	6/2019	Thurber et al.
D813,117 S	3/2018	Sullivan	D853,924 S	7/2019	Riggs et al.
D813,740 S	3/2018	Park	D854,462 S	7/2019	Lee
D813,741 S	3/2018	Perkins	D855,504 S	8/2019	Lee
D813,742 S	3/2018	McMahan et al.	D855,505 S	8/2019	Thurber et al.
D813,743 S	3/2018	Lee	D855,507 S	8/2019	Blanski et al.
D813,744 S	3/2018	Whitla et al.	D856,242 S	8/2019	Blanski et al.
D813,748 S	3/2018	Kim	D857,260 S	8/2019	Kil et al.
D813,753 S	3/2018	Loeb	D858,377 S	9/2019	Riggs et al.
D813,754 S	3/2018	Loeb	D859,237 S	9/2019	Koo et al.
D813,755 S	3/2018	Loeb	D859,238 S	9/2019	Smith et al.
D813,756 S	3/2018	Loeb	D859,239 S	9/2019	Sullivan et al.
D815,572 S	4/2018	Perkins	D859,252 S	9/2019	Krieg
D816,003 S	4/2018	Perkins	D859,253 S	9/2019	Izard
D816,563 S	5/2018	McMahan et al.	D859,254 S	9/2019	Izard
D816,565 S	5/2018	Kim	D860,077 S	9/2019	Riggs et al.
D817,836 S	5/2018	McMahan et al.	D860,079 S	9/2019	Sullivan et al.
D818,922 S	5/2018	Whitla et al.	D863,142 S	10/2019	Zipfel
D819,519 S	6/2018	Whitla et al.	D863,169 S	10/2019	Whitla et al.
D822,551 S	7/2018	McMahan et al.	D867,949 S	11/2019	Thurber et al.
D823,762 S	7/2018	Loeb	D868,660 S	12/2019	De Leon
D823,763 S	7/2018	Koo et al.	D873,751 S	1/2020	De Leon
D824,301 S *	7/2018	Lim ..... D12/169	D877,005 S	3/2020	Luke et al.
D826,113 S *	8/2018	Kanai ..... D12/169	D877,006 S	3/2020	Luke et al.
D828,246 S	9/2018	Loeb	D881,087 S	4/2020	Luke et al.
D828,261 S	9/2018	Moffett et al.	D897,255 S	9/2020	Zipfel
D829,143 S	9/2018	McMahan et al.	D897,919 S	10/2020	Choi et al.
D839,163 S	1/2019	Pinazzo et al.	D902,800 S	11/2020	Gay
D840,306 S	2/2019	Kozub	D902,801 S	11/2020	Gay
D841,547 S	2/2019	Zipfel et al.	D903,568 S	12/2020	Choi et al.
D843,904 S	3/2019	Kim	D931,158 S *	9/2021	Theis ..... D12/169
D845,186 S	4/2019	Koo et al.	D932,395 S *	10/2021	Akcay ..... D12/169
			D969,688 S *	11/2022	Janik ..... D12/169

\* cited by examiner

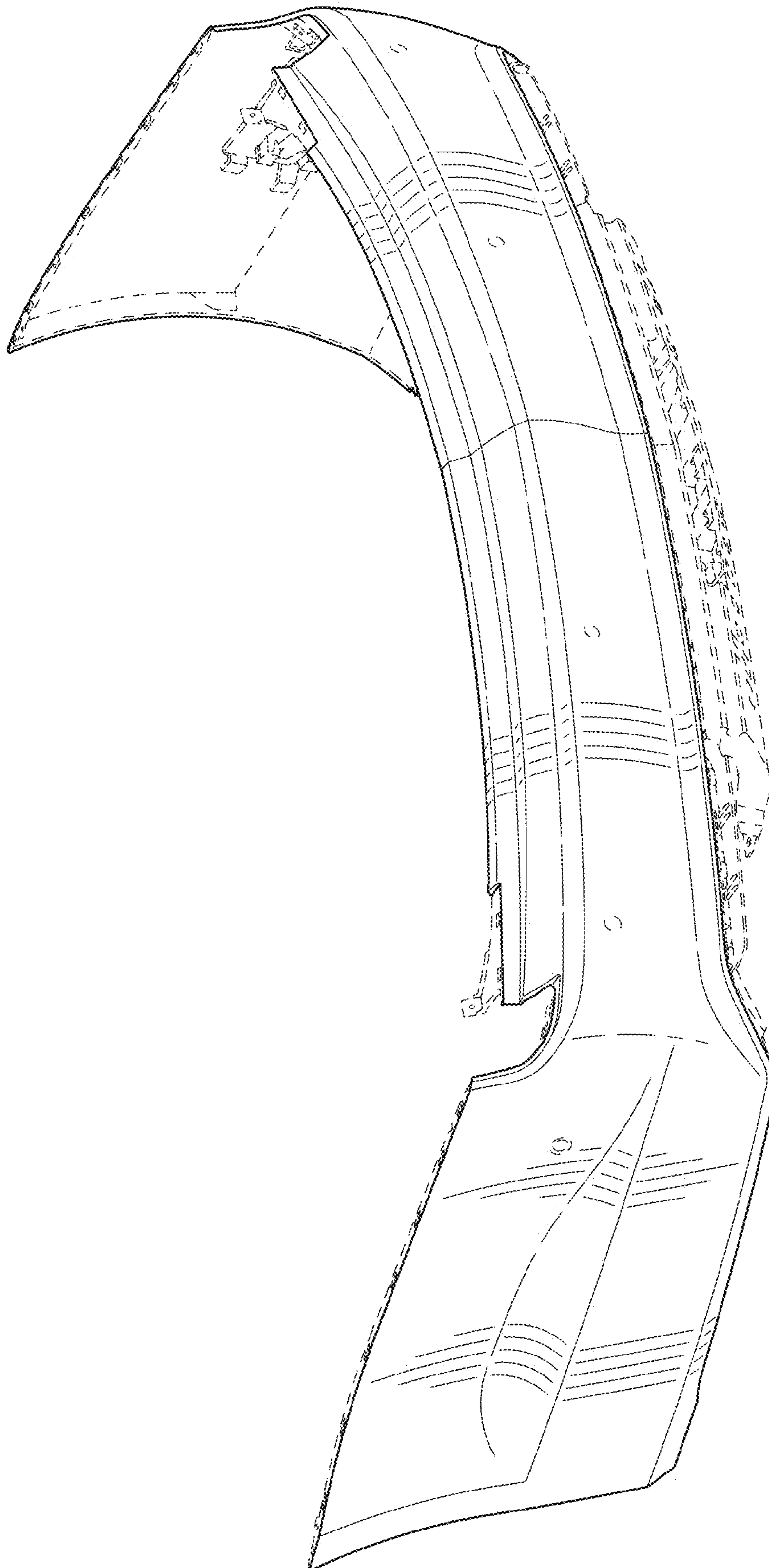


FIG. 1



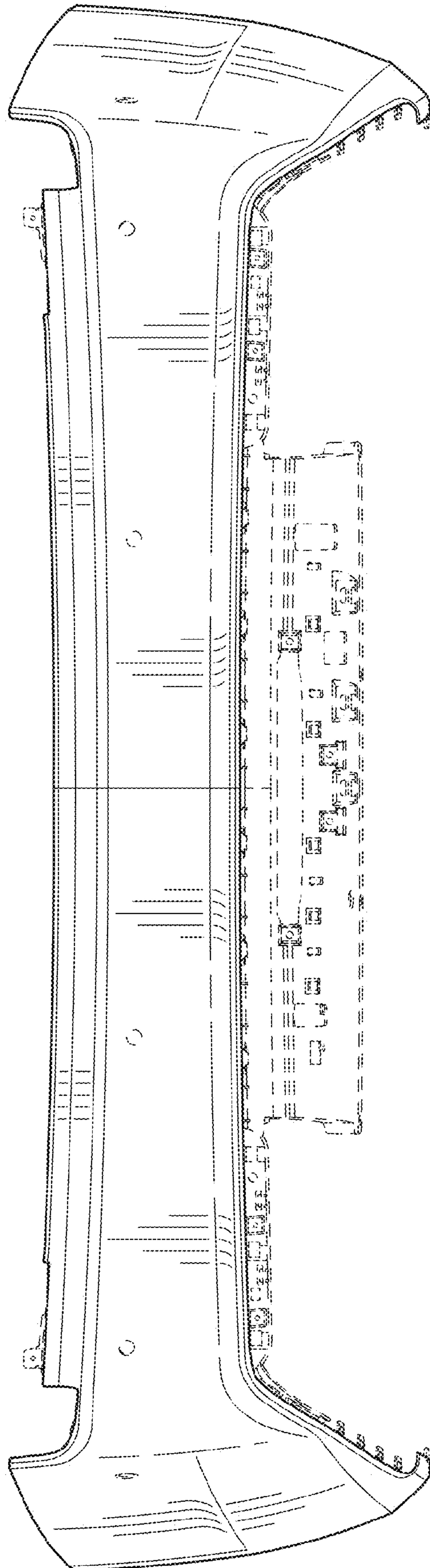


FIG. 2

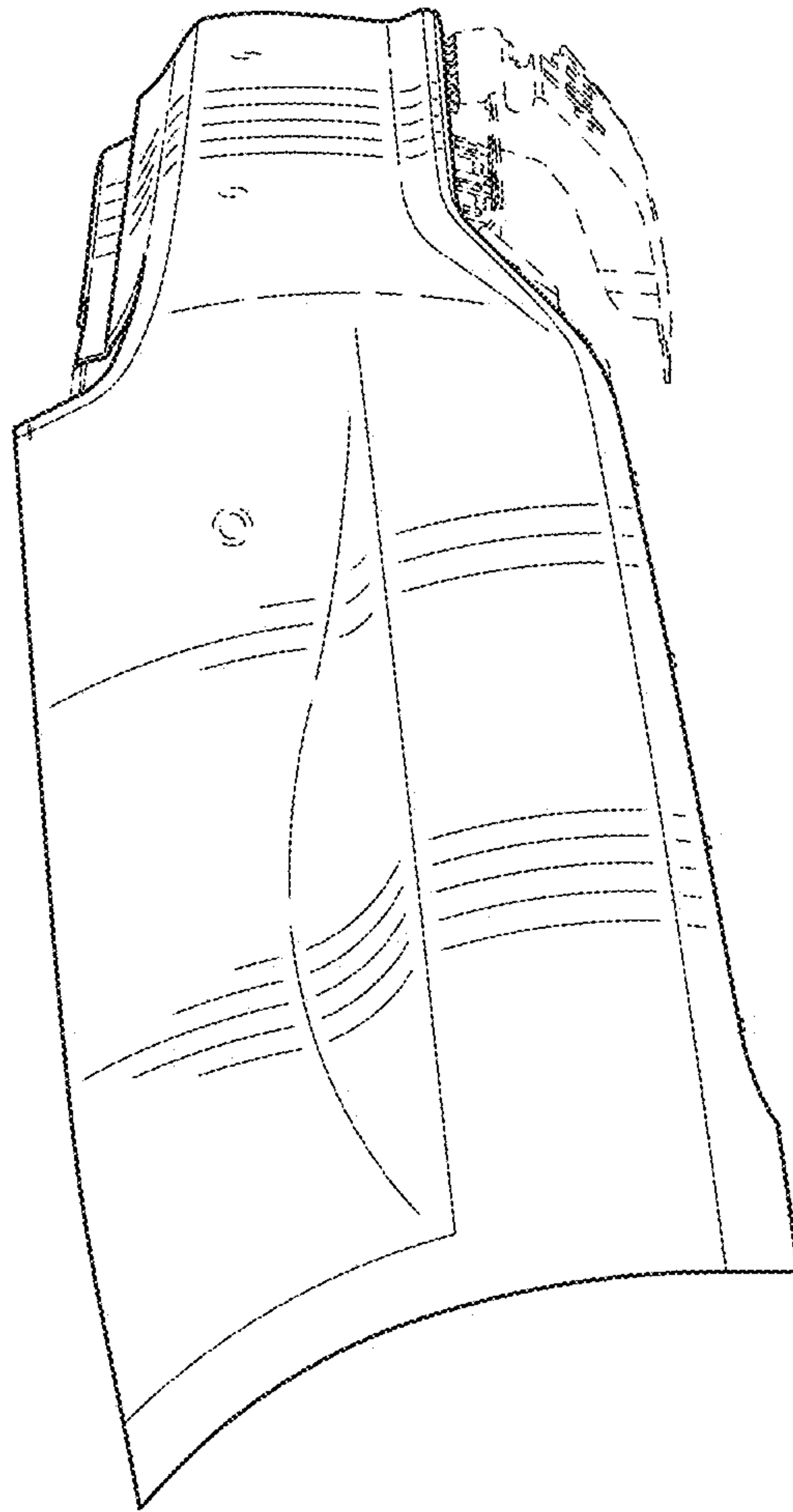


FIG. 3

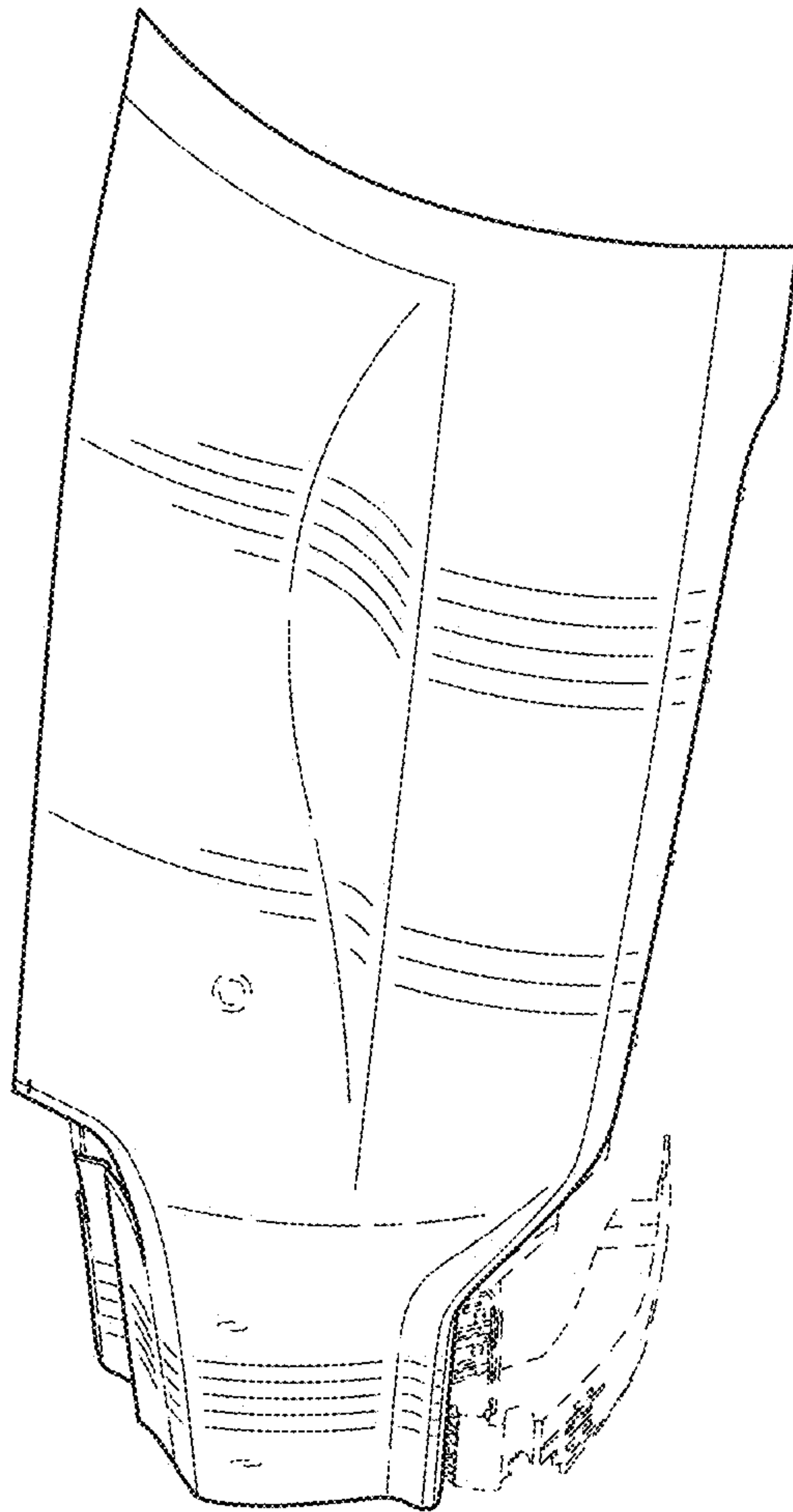


FIG. 4

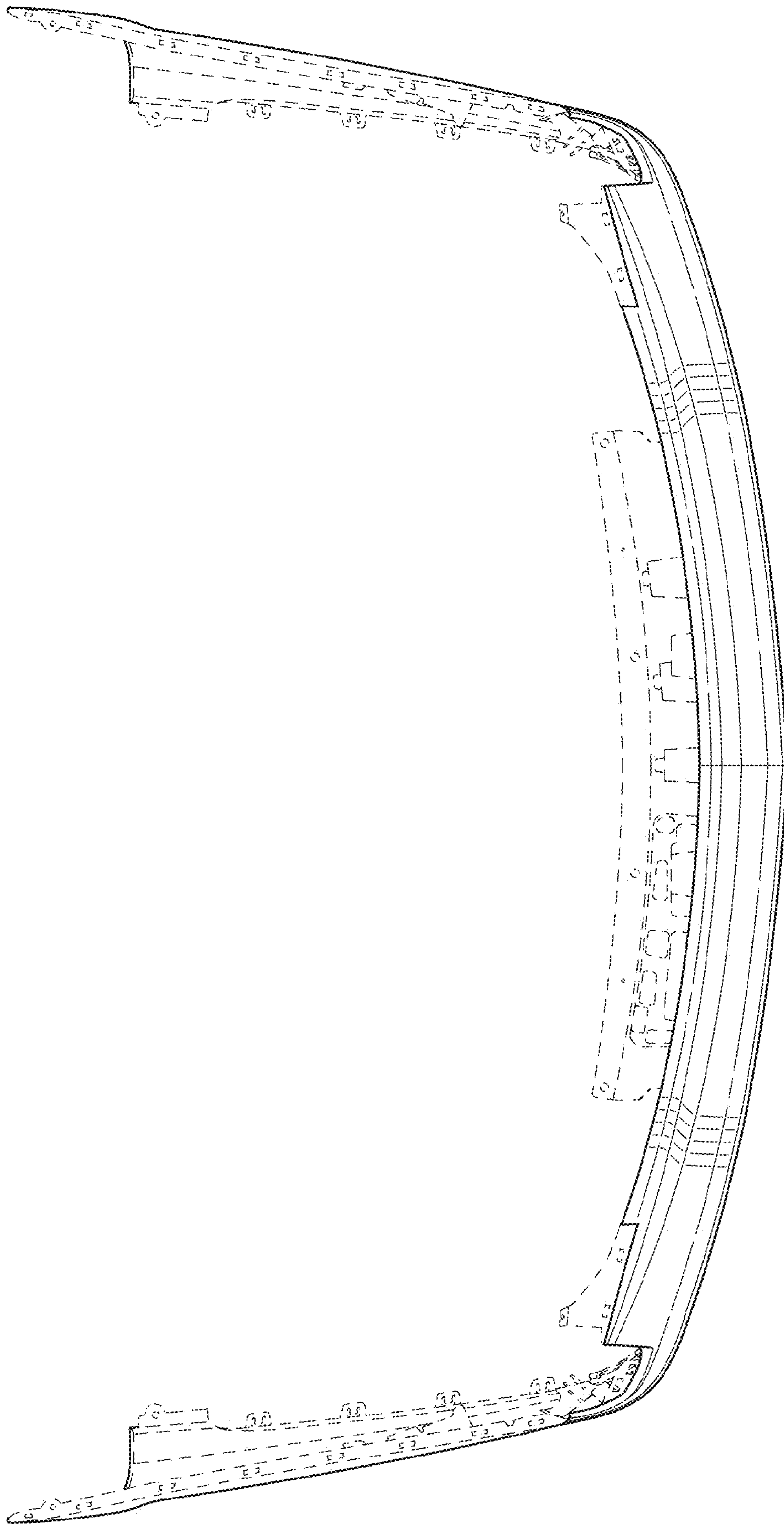


FIG. 5

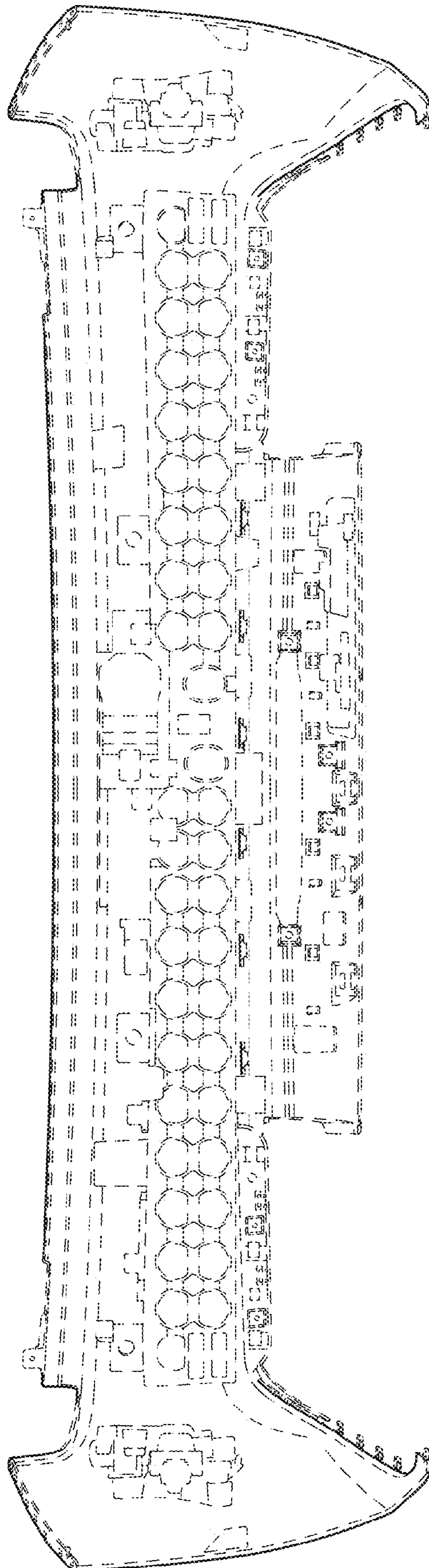


FIG. 6



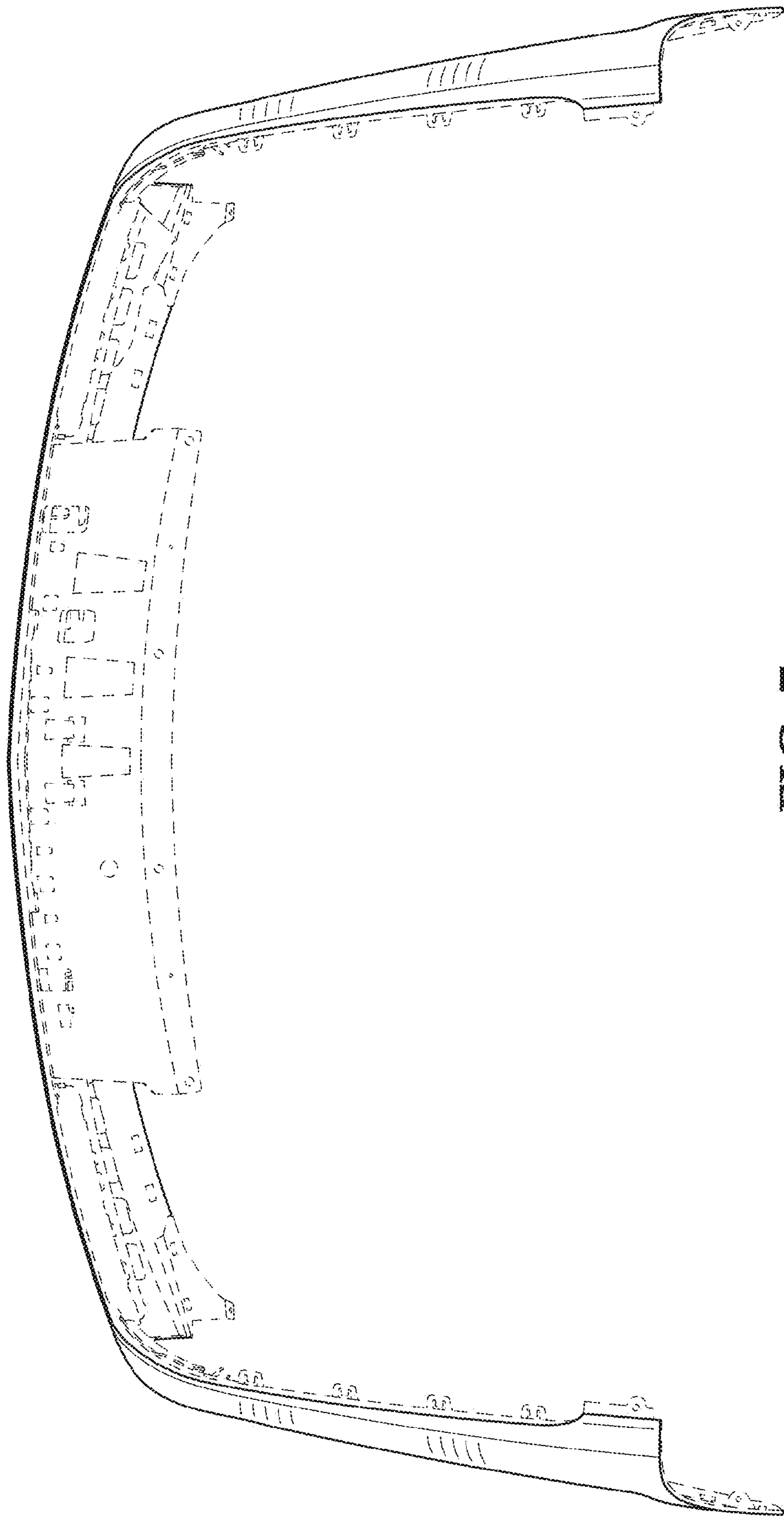


FIG. 7