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(12) **United States Design Patent**
Park Cheng et al.

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- (54) **VEHICLE FRONT BUMPER**
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- (52) **U.S. Cl.**
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- (58) **Field of Classification Search**
USPC D12/169, 196, 86, 90-92; 293/102, 113, 293/115, 117, 120; 296/180.1, 180.2
CPC B60R 19/02; B60R 19/04; B62D 25/08
See application file for complete search history.

- D608,249 S 1/2010 Peters
- D608,690 S 1/2010 Folden et al.
- D608,691 S 1/2010 Zak, Jr. et al.
- D609,608 S 2/2010 Boniface et al.
- D611,387 S 3/2010 Thompson et al.
- D611,879 S 3/2010 Kim et al.
- D612,297 S 3/2010 Peters et al.
- D613,645 S 4/2010 Song et al.
- D615,458 S 5/2010 Thompson et al.
- D618,595 S 6/2010 Ware et al.
- D623,090 S 9/2010 Cox et al.
- D627,262 S 11/2010 Ikeda et al.
- D635,488 S 4/2011 Phipps
- D644,147 S 8/2011 Suh et al.
- D644,567 S 9/2011 Kozub
- D657,718 S 4/2012 Zipfel et al.
- D659,052 S 5/2012 Ware et al.
- D659,053 S 5/2012 Ware et al.
- D668,182 S 10/2012 Barba Franco et al.
- D668,183 S 10/2012 Smart
- D678,820 S 3/2013 Son et al.

(Continued)

Primary Examiner — Melody N Brown

(57) **CLAIM**

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

DESCRIPTION

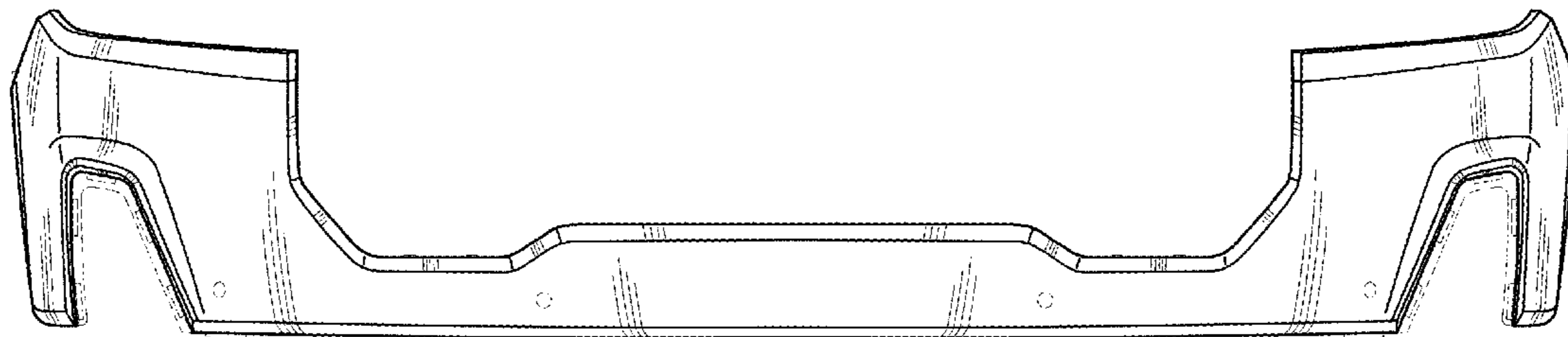
FIG. 1 is a front and left side perspective view of a vehicle front bumper showing our new design;
 FIG. 2 is a left side elevation view thereof, the right side being a mirror image of the left side shown;
 FIG. 3 is a front elevation view thereof; and,
 FIG. 4 is a top plan view thereof.

The broken lines shown in the drawings depict portions of the vehicle front bumper that form no part of the claimed design.

The shade lines in the figures show contour and not surface ornamentation.

1 Claim, 2 Drawing Sheets

- (56) **References Cited**
U.S. PATENT DOCUMENTS
- D570,742 S 6/2008 Takagi et al.
- D592,105 S 5/2009 Dean et al.
- D597,447 S 8/2009 Folden
- D600,595 S 9/2009 Nakamura et al.
- D601,925 S 10/2009 O'Donnell
- D603,755 S 11/2009 Peters
- D604,203 S 11/2009 O'Donnell
- D605,082 S 12/2009 Munson
- D605,083 S 12/2009 Manoogian, II et al.
- D605,977 S 12/2009 Zipfel et al.
- D605,978 S 12/2009 Wolff et al.



(56)

References Cited

U.S. PATENT DOCUMENTS

D678,821 S	3/2013	Ikeda et al.	D753,559 S	4/2016	McMahan et al.
D680,909 S	4/2013	Munson et al.	D753,560 S	4/2016	McMahan et al.
D680,910 S	4/2013	David	D753,567 S	4/2016	Boniface et al.
D684,899 S	6/2013	Baker	D754,571 S	4/2016	Boniface et al.
D686,536 S	7/2013	McCabe et al.	D754,572 S	4/2016	McMahan et al.
D692,798 S	11/2013	Thurber	D755,088 S	5/2016	McMahan et al.
D692,799 S	11/2013	Smith et al.	D756,869 S	5/2016	McMahan et al.
D696,157 S	12/2013	Loeb	D758,271 S	6/2016	McMahan et al.
D699,629 S	2/2014	Ikeda et al.	D764,975 S	8/2016	Aengenheyster
D700,871 S	3/2014	O'Donnell et al.	D764,976 S	8/2016	Aengenheyster
D703,103 S	4/2014	Lee	D767,449 S	9/2016	Pevovar et al.
D704,103 S	5/2014	Mack et al.	D767,450 S	9/2016	Lee et al.
D705,132 S	5/2014	Ware et al.	D767,451 S	9/2016	Kozub et al.
D705,699 S	5/2014	Ware et al.	D767,454 S	9/2016	McMahan et al.
D713,298 S	9/2014	Dyson	D767,458 S	9/2016	Kim
D713,764 S	9/2014	Ferlazzo et al.	D767,459 S	9/2016	Kim
D716,696 S	11/2014	Thole et al.	D767,460 S	9/2016	Kozub et al.
D716,706 S	11/2014	Thole et al.	D767,461 S	9/2016	Kozub et al.
D716,709 S	11/2014	Thole et al.	D771,528 S	11/2016	Smith et al.
D717,696 S	11/2014	Thole et al.	D771,529 S	11/2016	Thole et al.
D718,189 S	11/2014	Krieg et al.	D771,532 S	11/2016	Kapitonov
D718,683 S	12/2014	Thole et al.	D771,533 S	11/2016	Kapitonov
D722,282 S	2/2015	Loeb	D772,766 S	11/2016	Kozub et al.
D722,533 S	2/2015	Thole et al.	D772,767 S	11/2016	Kim
D722,534 S	2/2015	Munson et al.	D773,084 S	11/2016	Kapitonov
D724,510 S	3/2015	McMahan et al.	D773,086 S	11/2016	McCabe et al.
D725,001 S	3/2015	McMahan et al.	D774,226 S	12/2016	McCabe et al.
D726,591 S	4/2015	Jacob	D775,003 S	12/2016	Pevovar et al.
D730,776 S	6/2015	Smart	D775,007 S	12/2016	Thole et al.
D730,783 S	6/2015	Henriques et al.	D775,010 S	12/2016	Kim et al.
D732,427 S	6/2015	Loeb	D775,049 S	12/2016	Scheer et al.
D732,429 S	6/2015	Loeb	D775,549 S	1/2017	Karras
D732,430 S	6/2015	Loeb	D775,554 S	1/2017	Kapitonov
D732,431 S	6/2015	Loeb	D776,020 S	1/2017	Kapitonov
D732,432 S	6/2015	Aengenheyster	D776,581 S	1/2017	Pevovar et al.
D732,433 S	6/2015	Aengenheyster	D776,583 S	1/2017	Scheer et al.
D732,435 S	6/2015	Mackay	D776,841 S	1/2017	Kozub et al.
D733,002 S	6/2015	Loeb	D776,843 S	1/2017	McCabe et al.
D735,611 S	8/2015	Aengenheyster	D776,846 S	1/2017	Willett et al.
D735,627 S	8/2015	Smith	D777,359 S	1/2017	Kozub et al.
D736,451 S	8/2015	Smith	D777,360 S	1/2017	Kozub et al.
D739,306 S	9/2015	McMahan et al.	D777,361 S	1/2017	Kozub et al.
D739,317 S	9/2015	McMahan et al.	D777,604 S	1/2017	McNerney
D741,223 S	10/2015	Kim et al.	D777,605 S	1/2017	Ferlazzo et al.
D743,309 S	11/2015	Thole et al.	D777,620 S	1/2017	Pevovar et al.
D743,313 S	11/2015	Smith et al.	D777,621 S	1/2017	Kim
D743,314 S	11/2015	Thole et al.	D777,622 S	1/2017	Kozub et al.
D743,857 S	11/2015	McMahan et al.	D777,628 S	1/2017	Kozub et al.
D744,158 S	11/2015	Willett et al.	D777,955 S	1/2017	Willett et al.
D745,086 S	12/2015	Finos et al.	D778,212 S	2/2017	Kozub et al.
D745,719 S	12/2015	Boniface et al.	D778,215 S	2/2017	Kozub et al.
D745,725 S	12/2015	McMahan et al.	D780,064 S	2/2017	Smith et al.
D745,726 S	12/2015	McMahan et al.	D780,067 S	2/2017	Zipfel et al.
D745,837 S	12/2015	Smith et al.	D780,068 S	2/2017	Whitla et al.
D746,726 S	1/2016	Smith et al.	D780,077 S	2/2017	Kim et al.
D746,727 S	1/2016	Smith et al.	D780,081 S	2/2017	Lee
D746,728 S	1/2016	Smith et al.	D780,084 S	2/2017	Scheer et al.
D746,729 S	1/2016	Boniface et al.	D780,631 S	3/2017	Kozub et al.
D746,730 S	1/2016	Kim et al.	D780,644 S	3/2017	Kim et al.
D747,514 S	1/2016	McMahan et al.	D781,184 S	3/2017	Thole et al.
D747,515 S	1/2016	McMahan et al.	D781,192 S	3/2017	Kozub et al.
D747,819 S	1/2016	Thole et al.	D782,379 S	3/2017	Wassell
D749,021 S	2/2016	Boniface et al.	D783,482 S	4/2017	Smith et al.
D749,026 S	2/2016	Smith et al.	D784,213 S	4/2017	Karras
D749,027 S	2/2016	McMahan et al.	D784,223 S	4/2017	Lee
D749,246 S	2/2016	Thole et al.	D784,226 S	4/2017	Cheng
D749,249 S	2/2016	Thole et al.	D784,579 S	4/2017	Cheng et al.
D749,250 S	2/2016	Thole et al.	D784,877 S	4/2017	Lee
D749,985 S	2/2016	Kozub et al.	D784,886 S	4/2017	Smith et al.
D749,997 S	2/2016	McMahan et al.	D785,521 S	5/2017	Smith et al.
D750,001 S	2/2016	Thole et al.	D786,149 S	5/2017	Pevovar et al.
D753,032 S	4/2016	Smith et al.	D786,743 S	5/2017	Smith et al.
D753,033 S	4/2016	Thole et al.	D786,750 S	5/2017	Lee
D753,034 S	4/2016	Thole et al.	D787,446 S	5/2017	Cockerill
D753,035 S	4/2016	Boniface et al.	D787,984 S	5/2017	Fang
			D787,988 S	5/2017	Lee
			D787,989 S	5/2017	Kozub et al.
			D787,990 S	5/2017	Kozub et al.
			D787,992 S	5/2017	Lee

(56)

References Cited

U.S. PATENT DOCUMENTS

D787,993 S 5/2017 McCabe et al.
 D788,001 S 5/2017 Lee
 D788,641 S 6/2017 Arnold
 D788,644 S 6/2017 Mueller
 D788,645 S 6/2017 Mueller
 D789,250 S 6/2017 Arnold
 D789,260 S 6/2017 Smith
 D789,575 S 6/2017 Willett
 D789,841 S 6/2017 Lee
 D789,849 S 6/2017 Lee
 D791,018 S 7/2017 Mylenek et al.
 D791,644 S 7/2017 Fang
 D792,290 S 7/2017 Smith et al.
 D792,293 S 7/2017 McCabe et al.
 D792,294 S 7/2017 McCabe et al.
 D792,295 S 7/2017 McCabe et al.
 D792,815 S 7/2017 Kozub
 D792,816 S 7/2017 Kozub
 D793,290 S 8/2017 Kozub
 D793,292 S 8/2017 Lee
 D793,293 S 8/2017 Lee et al.
 D793,294 S 8/2017 Lee
 D793,295 S 8/2017 McCabe et al.
 D793,296 S 8/2017 Smith et al.
 D793,297 S 8/2017 Smith et al.
 D793,299 S 8/2017 Krieg et al.
 D793,300 S 8/2017 Krieg et al.
 D793,301 S 8/2017 Kozub
 D793,302 S 8/2017 Kozub
 D793,311 S 8/2017 Whitla et al.
 D793,590 S 8/2017 Kozub et al.

D793,591 S 8/2017 Kozub et al.
 D793,917 S 8/2017 Kozub
 D793,918 S 8/2017 Kozub
 D794,229 S 8/2017 Barry
 D794,230 S 8/2017 Kozub
 D795,747 S 8/2017 Bailie
 D795,757 S 8/2017 Pevovar et al.
 D795,758 S 8/2017 Karras
 D795,759 S 8/2017 Kozub et al.
 D795,760 S 8/2017 Kozub et al.
 D795,762 S 8/2017 Lee
 D795,763 S 8/2017 Kozub
 D796,088 S 8/2017 McCabe et al.
 D796,093 S 8/2017 Mainville
 D796,390 S 9/2017 Pevovar et al.
 D797,537 S 9/2017 Cooper et al.
 D797,603 S 9/2017 Noone et al.
 D797,614 S 9/2017 Lee
 D797,616 S 9/2017 Lee
 D797,624 S 9/2017 Nakamura
 D797,625 S 9/2017 Perkins
 D797,631 S 9/2017 Pevovar et al.
 D797,632 S 9/2017 Zipfel et al.
 D797,967 S 9/2017 Barry
 D797,970 S 9/2017 Mainville
 D797,971 S 9/2017 Mainville
 D797,972 S 9/2017 Whitla et al.
 D798,204 S 9/2017 Mainville
 D799,384 S 10/2017 Kozub et al.
 D799,385 S 10/2017 Kozub et al.
 D799,386 S 10/2017 Kozub et al.
 D799,728 S 10/2017 Whitla et al.
 D813,734 S * 3/2018 Nakamura D12/169
 D826,114 S * 8/2018 Smith et al. D12/169

* cited by examiner

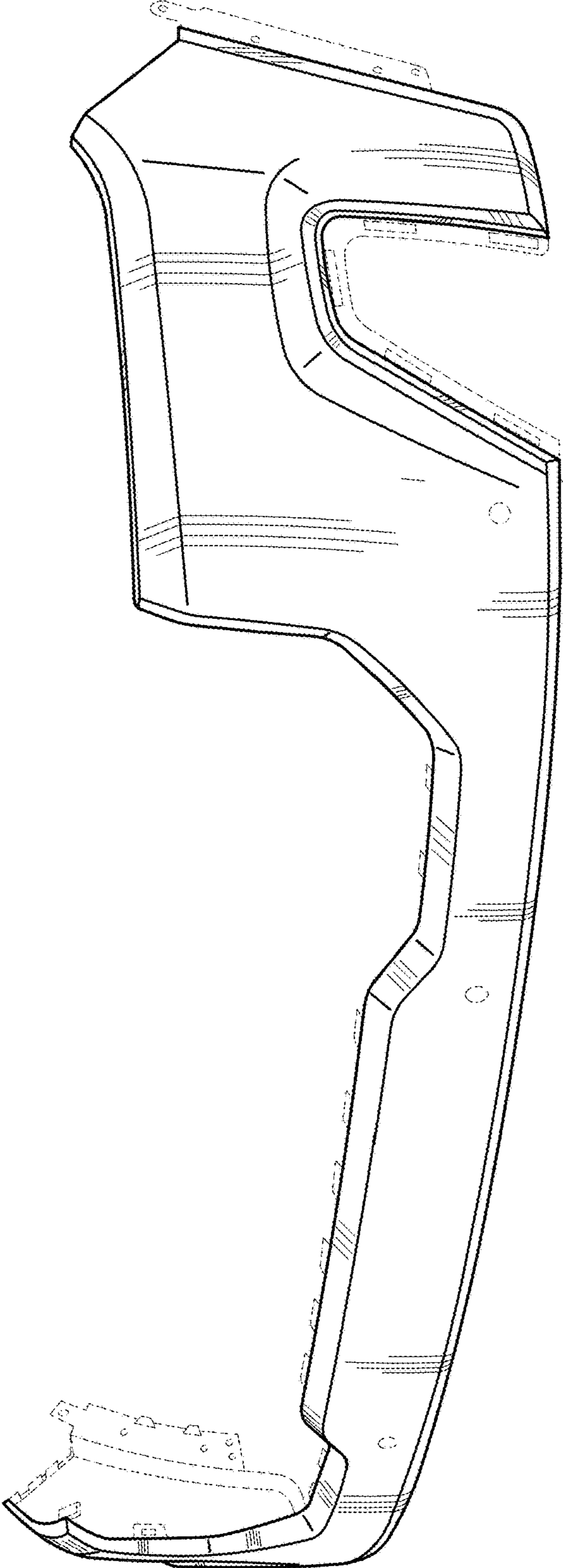


FIG - 1

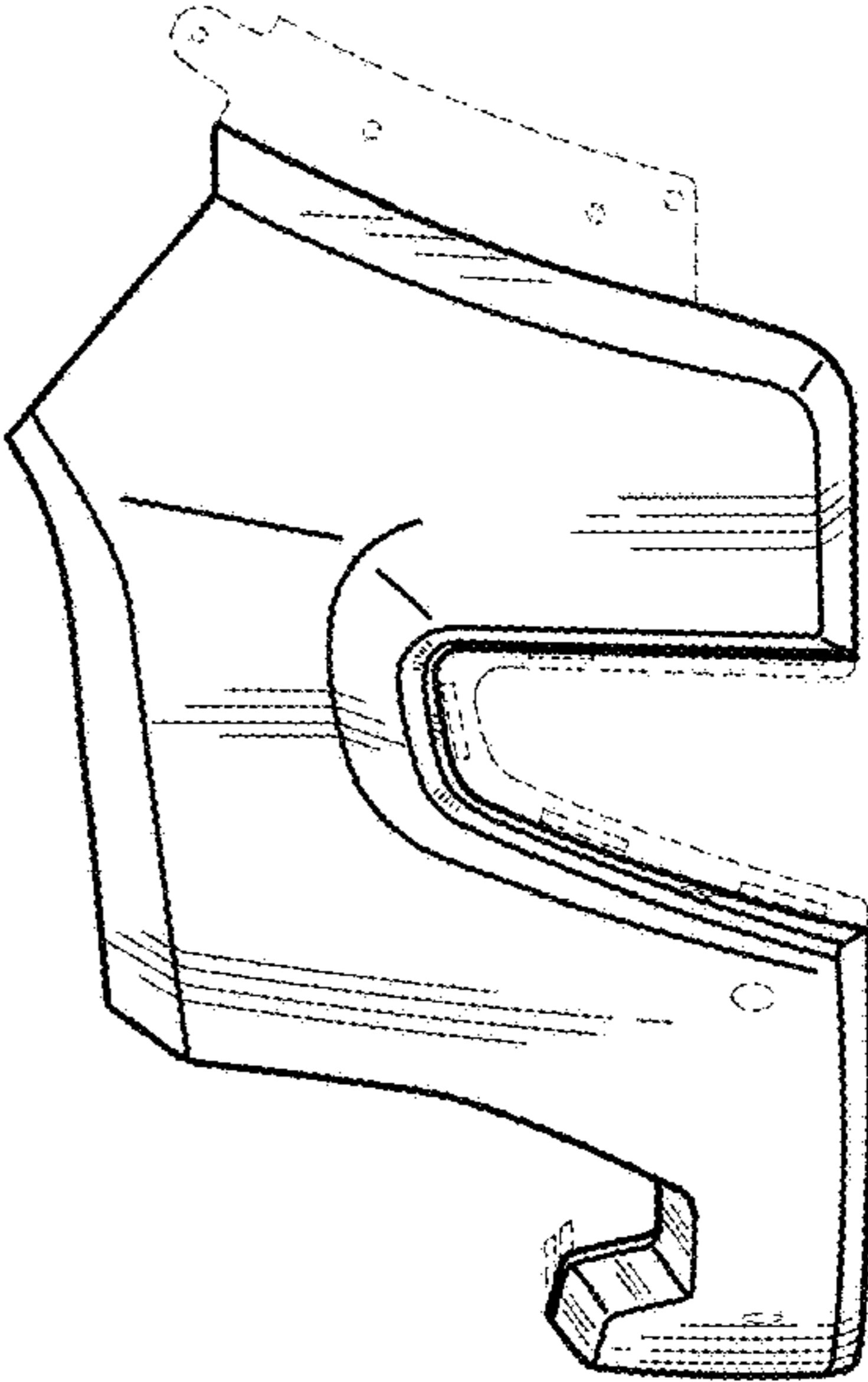


FIG - 2

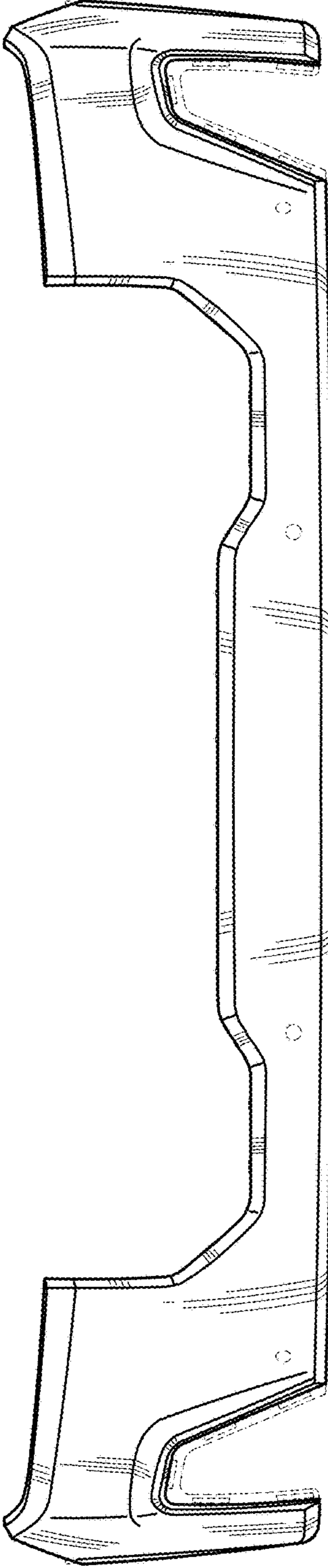


FIG - 3

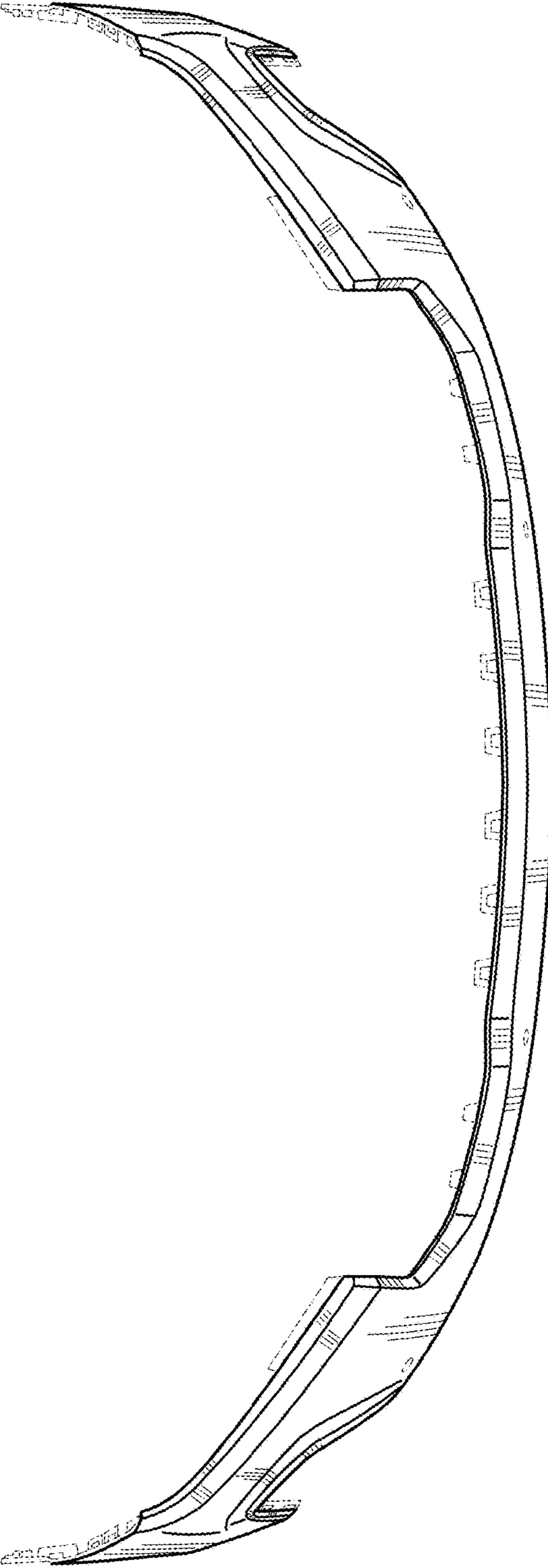


FIG - 4