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(12) **United States Design Patent**
Kozub

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- (54) **VEHICLE FRONT LOWER BUMPER**
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- (52) **U.S. Cl.**
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- (58) **Field of Classification Search**
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CPC B60R 19/02; B60R 19/04; B62D 25/08
See application file for complete search history.

- 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.
- D678,821 S 3/2013 Ikeda et al.
- D680,909 S 4/2013 Munson et al.
- D680,910 S 4/2013 David
- D684,899 S 6/2013 Baker
- D686,536 S 7/2013 McCabe et al.
- D692,798 S 11/2013 Thurber

(Continued)

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(57) **CLAIM**

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

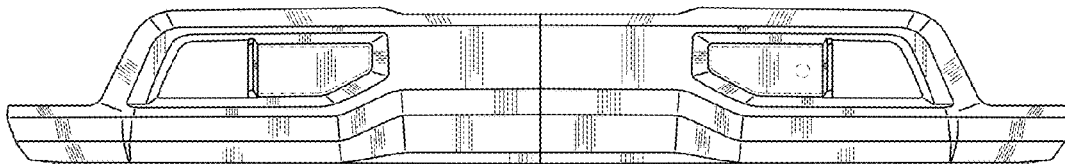
DESCRIPTION

FIG. 1 is a front and left side perspective view of a vehicle front lower bumper showing my 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 bottom plan view thereof.
The broken lines shown in the drawings depict portions of the vehicle front lower bumper that form no part of the claimed design.

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.
- 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.



(56)

References Cited

U.S. PATENT DOCUMENTS

D692,799 S	11/2013	Smith et al.	D754,572 S	4/2016	McMahan et al.
D696,157 S	12/2013	Loeb	D755,088 S	5/2016	McMahan et al.
D699,629 S	2/2014	Ikeda et al.	D756,869 S	5/2016	McMahan et al.
D700,871 S	3/2014	O'Donnell et al.	D758,271 S	6/2016	McMahan et al.
D703,103 S	4/2014	Lee	D764,975 S	8/2016	Aengenheyster
D704,103 S	5/2014	Mack et al.	D764,976 S	8/2016	Aengenheyster
D705,132 S	5/2014	Ware et al.	D767,449 S	9/2016	Pevovar et al.
D705,699 S	5/2014	Ware et al.	D767,450 S	9/2016	Lee et al.
D713,298 S	9/2014	Dyson	D767,451 S	9/2016	Kozub et al.
D713,764 S	9/2014	Ferlazzo et al.	D767,454 S	9/2016	McMahan et al.
D716,696 S	11/2014	Thole et al.	D767,458 S	9/2016	Kim
D716,706 S	11/2014	Thole et al.	D767,459 S	9/2016	Kim
D716,709 S	11/2014	Thole et al.	D767,460 S	9/2016	Kozub et al.
D717,696 S	11/2014	Thole et al.	D767,461 S	9/2016	Kozub et al.
D718,189 S	11/2014	Krieg et al.	D771,528 S	11/2016	Smith et al.
D718,683 S	12/2014	Thole et al.	D771,529 S	11/2016	Thole et al.
D722,282 S	2/2015	Loeb	D771,532 S	11/2016	Kapitonov
D722,533 S	2/2015	Thole et al.	D771,533 S	11/2016	Kapitonov
D722,534 S	2/2015	Munson et al.	D772,766 S	11/2016	Kozub et al.
D724,510 S	3/2015	McMahan et al.	D772,767 S	11/2016	Kim
D725,001 S	3/2015	McMahan et al.	D773,084 S	11/2016	Kapitonov
D726,591 S	4/2015	Jacob	D773,086 S	11/2016	McCabe et al.
D730,776 S	6/2015	Smart	D774,226 S	12/2016	McCabe et al.
D730,783 S	6/2015	Henriques et al.	D775,003 S	12/2016	Pevovar et al.
D732,427 S	6/2015	Loeb	D775,007 S	12/2016	Thole et al.
D732,429 S	6/2015	Loeb	D775,010 S	12/2016	Kim et al.
D732,430 S	6/2015	Loeb	D775,049 S	12/2016	Scheer et al.
D732,431 S	6/2015	Loeb	D775,549 S	1/2017	Karras
D732,432 S	6/2015	Aengenheyster	D775,554 S	1/2017	Kapitonov
D732,433 S	6/2015	Aengenheyster	D776,020 S	1/2017	Kapitonov
D732,435 S	6/2015	Mackay	D776,581 S	1/2017	Pevovar et al.
D733,002 S	6/2015	Loeb	D776,583 S	1/2017	Scheer et al.
D735,611 S	8/2015	Aengenheyster	D776,841 S	1/2017	Kozub et al.
D735,627 S	8/2015	Smith	D776,843 S	1/2017	McCabe et al.
D736,451 S	8/2015	Smith	D776,846 S	1/2017	Willett et al.
D739,306 S	9/2015	McMahan et al.	D777,359 S	1/2017	Kozub et al.
D739,317 S	9/2015	McMahan et al.	D777,360 S	1/2017	Kozub et al.
D741,223 S	10/2015	Kim et al.	D777,361 S	1/2017	Kozub et al.
D743,309 S	11/2015	Thole et al.	D777,604 S	1/2017	McNerney
D743,313 S	11/2015	Smith et al.	D777,605 S	1/2017	Ferlazzo et al.
D743,314 S	11/2015	Thole et al.	D777,620 S	1/2017	Pevovar et al.
D743,857 S	11/2015	McMahan et al.	D777,621 S	1/2017	Kim
D744,158 S	11/2015	Willett et al.	D777,622 S	1/2017	Kozub et al.
D745,086 S	12/2015	Finos et al.	D777,628 S	1/2017	Kozub et al.
D745,719 S	12/2015	Boniface et al.	D777,955 S	1/2017	Willett et al.
D745,725 S	12/2015	McMahan et al.	D778,212 S	2/2017	Kozub et al.
D745,726 S	12/2015	McMahan et al.	D778,215 S	2/2017	Kozub et al.
D745,837 S	12/2015	Smith et al.	D780,064 S	2/2017	Smith et al.
D746,190 S	* 12/2015	Wolff D12/169	D780,067 S	2/2017	Zipfel et al.
D746,726 S	1/2016	Smith et al.	D780,068 S	2/2017	Whitla et al.
D746,727 S	1/2016	Smith et al.	D780,077 S	2/2017	Kim et al.
D746,728 S	1/2016	Smith et al.	D780,081 S	2/2017	Lee
D746,729 S	1/2016	Boniface et al.	D780,084 S	2/2017	Scheer et al.
D746,730 S	1/2016	Kim et al.	D780,631 S	3/2017	Kozub et al.
D746,737 S	* 1/2016	Wolff D12/169	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
D753,559 S	4/2016	McMahan et al.	D787,988 S	5/2017	Lee
D753,560 S	4/2016	McMahan et al.	D787,989 S	5/2017	Kozub et al.
D753,567 S	4/2016	Boniface et al.	D787,990 S	5/2017	Kozub et al.
D754,571 S	4/2016	Boniface et al.	D787,992 S	5/2017	Lee
			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

(56)

References Cited

U.S. PATENT DOCUMENTS

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	
D796,398 S *	9/2017	Badstuebner	D12/169
D813,748 S *	3/2018	Kim	D12/169
D813,749 S *	3/2018	Bucher	D12/169
D813,755 S *	3/2018	Loeb	D12/169

* cited by examiner

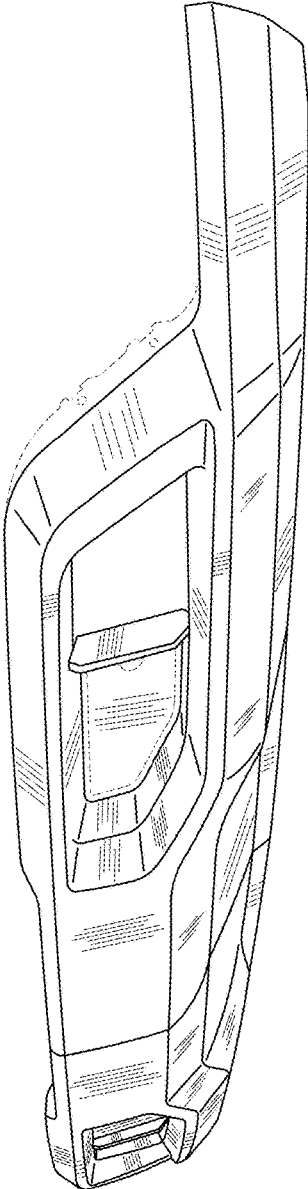


FIG-1

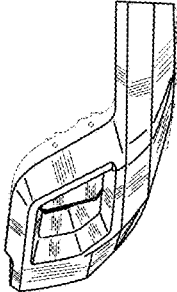


FIG-2

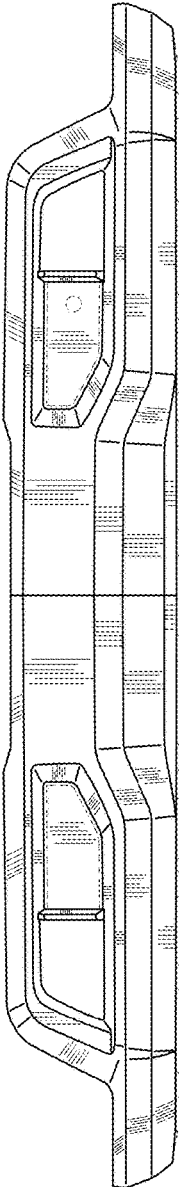


FIG - 3

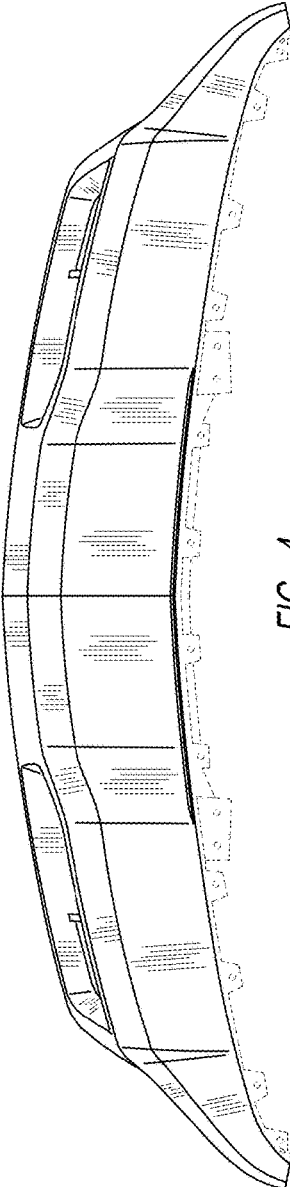


FIG - 4