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(71) Applicant: **FARADAY&FUTURE INC.** [US/US]; 18455 S. Figueroa Street, Gardena, CA 90248 (US).

(72) Inventors: **ASHRAF, Umran**; Faraday&Future Inc., 18455 S. Figueroa Street, Gardena, CA 90248 (US). **COLT, John Michael**; Faraday&Future Inc., 18455 S. Figueroa Street, Gardena, CA 90248 (US). **BORGHI, Cory Denis**;

Faraday&Future Inc., 18455 S. Figueroa Street, Gardena, CA 90248 (US).

(74) Agent: **YANG, David T.** et al.; Morrison & Foerster LLP, 707 Wilshire Boulevard, Los Angeles, CA 90017 (US).

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(54) Title: TAPERED CRUSH CAN FOR A VEHICLE

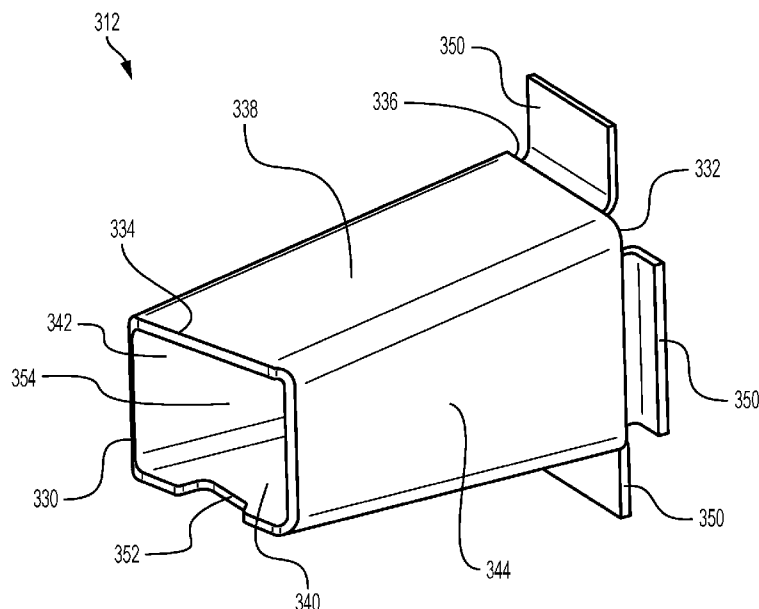


FIG. 16

(57) Abstract: Vehicular crush cans (also known as crumple zones) for motor vehicles are provided herein. An example crush can includes a first open end, a second open end, and a longitudinal axis running from the first open end to the second open end. The crush can further includes a top wall, a bottom wall, a first side wall and a second side wall. The top wall and the bottom wall taper from the second open end towards the first open end. The crush can uniformly collapses when under compressive forces along the longitudinal axis.





EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV,
MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2017/015857**A. CLASSIFICATION OF SUBJECT MATTER****B60R 19/34(2006.01)i, B60K 1/04(2006.01)i, B62D 21/15(2006.01)i**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

B60R 19/34; B60R 19/02; B21D 41/02; F16F 7/12; B60R 19/24; B60K 1/04; B62D 21/15

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: crush can, taper, collapse, fold, convex, concave, flange, bumper, frame rail

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 2007-283868 A (TOYOTA MOTOR CORP.) 01 November 2007 See paragraphs [0019], [0021], [0034]–[0038], [0045] and figures 1-3, 5, 6.	1-20
A	US 2015-0061307 A1 (NAKANISHI, MAKOTO) 05 March 2015 See paragraphs [0039]–[0042] and figures 1-3.	1-20
A	JP 2010-508154 A (SHAPE CORPORATION) 18 March 2010 See claim 1 and figure 8.	1-20
A	US 2014-0319860 A1 (GM GLOBAL TECHNOLOGY OPERATIONS LLC.) 30 October 2014 See paragraph [0026] and figure 4.	1-20
A	US 2014-0191532 A1 (HIROSE, SATOSHI) 10 July 2014 See paragraphs [0066]–[0074] and figures 1A-1D.	1-20



Further documents are listed in the continuation of Box C.



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"&" document member of the same patent family

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International Application Division

Korean Intellectual Property Office

189 Cheongsa-ro, Seo-gu, Daejeon, 35208, Republic of Korea

Facsimile No. +82-42-481-8578

Authorized officer

LEE, Chang Ho

Telephone No. +82-42-481-8288



INTERNATIONAL SEARCH REPORT

Information on patent family members

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