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Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a
patent (Rule 4.17(ii))

[Continued on next page]

(54) Title: HOOD PEDESTRIAN ENERGY ABSORBER

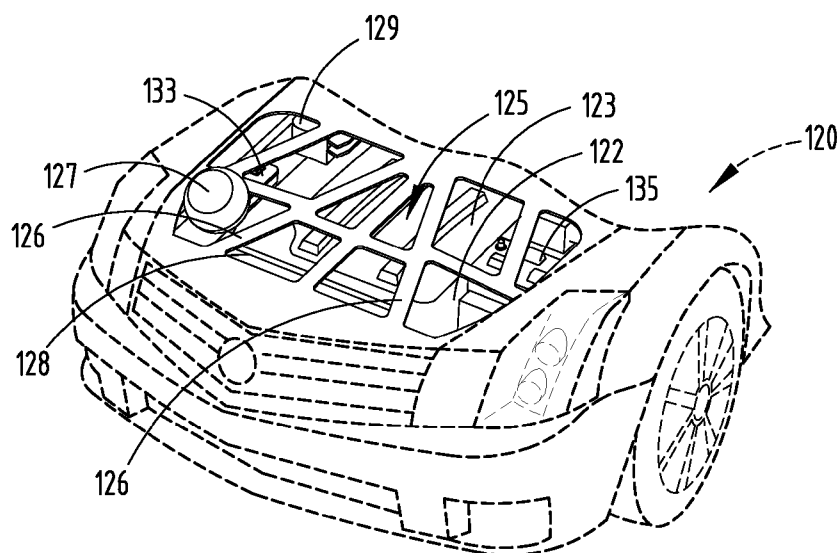


FIG. 14

(57) Abstract: An energy absorbing system includes a hood with inner and outer panels defining a rear edge cavity, and a pair of polymeric energy absorbers on hard components in the cavity. The hood and energy absorber are tuned to minimize an HIC value when a pedestrian's head contacts the hood during an impact to absorb energy prior to the hood bottoming out on the plenum of the vehicle. The energy absorber is preferably made of a polymeric material capable of withstanding high temperatures associated with going through a paint oven or e-coat process, such as high temperature nylon. The illustrated energy absorber has a hat-shaped cross section and includes criss-crossing flanges tuned to provide an optimal force-deflection curve during impact.



- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))* — *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

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INTERNATIONAL SEARCH REPORT

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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)

B62D 25/12; B60R 21/02; B23P 11/00; B62D 25/10

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: vehicle, hood, energy-absorber, hollow crush lobe, base flange, pedestrian

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2009-0026807 A1 (WANG JENNE-TAI et al.) 29 January 2009 See page 1, paragraph [0025] - page 6, paragraph [0057]; claims 1, 12, 33; figures 1-5.	1,3,4,6
Y		2,5,7-15
Y	US 2009-0065277 A1 (WANG JENNE-TAI et al.) 12 March 2009 See page 2, paragraphs [0020]-[0021]; figure 2.	2
Y	US 05706908A A (SAKAI; AKITO et al.) 13 January 1998 See abstract, figures 3-5, 11A-11C, 13-14C, 33.	5,7-15
X	US 2010-0140979 A1 (SEKSARIA DINESH C. et al.) 10 June 2010 See page 3, paragraph [0055] - page 4, paragraph [0066]; figures 1-2.	1
X	US 2005-0082875 A1 (KOKI IKEDA et al.) 21 April 2005 See page 2, paragraphs [0022] - [0032]; figures 1-3.	1

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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