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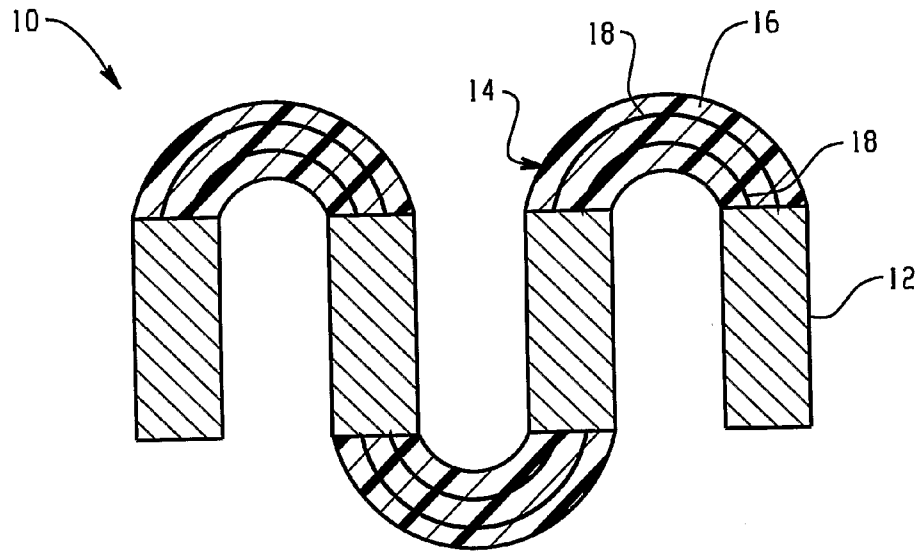
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[Continued on next page]

(54) Title: PANELS HAVING ACTIVE MATERIAL BASED FOLD LINES



(57) Abstract: A panel (10) having active material based segments (14), wherein the segments define a hinge location that can be selectively stiffened or folded on demand. The active material based segments include an active material such that activation of the active material by an activation device can allow folding of the panel, can effect self-folding of the panel, or can serve to lock the panel into a fixed position when to activated. In this manner, the panel that can be variously stiffened or folded on demand. Other embodiments include forming the panel of the active material such that the panel can be compacted and stowed upon activation of the active material to change the modulus properties thereof.

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A. CLASSIFICATION OF SUBJECT MATTER
IPC: **B62D 39/00**(2007.01)

USPC: 296/181.1,191
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)
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X, P	US 6,772,479 B2 (HINKLEY et al.) 10 August 2004 (10.08.2004), see figure 2.	1-3, 5, 9-11, and 13
A	US 2005/0199845 A1 (JONES et al.) 15 September 2005 (15.09.2005), see paragraphs 0045-0071.	1-20

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

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Continuation of B. FIELDS SEARCHED Item 3:
EAST--USPAT, USPGPUB, EPO, JPO, DERWENT, IBM-TDB, FPRS--
searched (shape with memory) and fold$3
searched (shape with membery) and fold$3 and signal and controller
searched panel with shape with memory with polymer
searched shape with memory with hinge