

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
28 September 2006 (28.09.2006)

PCT

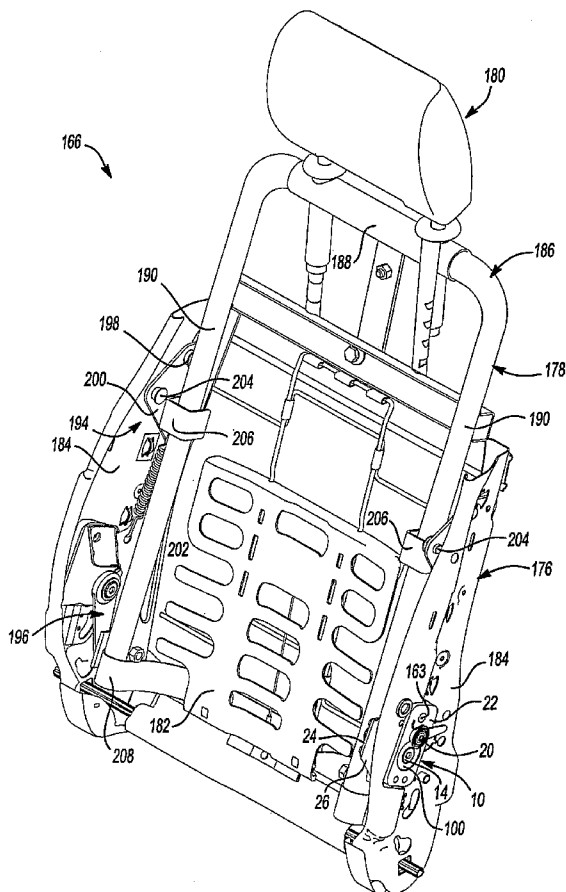
(10) International Publication Number
WO 2006/102404 A3

- (51) International Patent Classification:
B64D 25/04 (2006.01)
- (21) International Application Number:
PCT/US2006/010388
- (22) International Filing Date: 22 March 2006 (22.03.2006)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/664,126 22 March 2005 (22.03.2005) US
11/376,758 15 March 2006 (15.03.2006) US
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: SPINAL PROTECTION SYSTEM FOR AUTOMOTIVE SEAT



(57) Abstract: An energy absorption assembly for a seat assembly having a seatback including a first frame and a second frame includes a housing, a torsion bar rotatably supported by the housing in a first rotational direction and in a second rotational direction, and a clutch assembly engaged with the torsion bar. Engagement between the clutch assembly and the torsion bar permits rotation of the torsion bar relative to the housing in one of the first direction and the second direction to permit movement of the second frame relative to the first frame and restricts rotation of the torsion bar relative to the housing in the other of the first direction and the second direction to restrict movement of the second frame relative to the first frame. Restricting rotation of the torsion bar relative to the housing absorbs energy associated with movement of the second frame relative to the first frame.

WO 2006/102404 A3



Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(88) Date of publication of the international search report:

30 August 2007

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/10388

A. CLASSIFICATION OF SUBJECT MATTER
 IPC(8) - B64D 25/04 (2007.01)
 USPC - 297/216.13
 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)
 IPC(8) - B64D 25/04 (2007.01)
 USPC - 297/216.13

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)
 PatBase

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	WO 2004/024560 A1 (DE WILDE et al) 25 March 2004 (25.03.2004) entire document	1-6, 8-10, 12-16, 18-20, 24-35 --- 7, 11, 17, 21-23
Y	US 6,446,897 B1 (ARIMA et al) 10 September 2002 (10.09.2002) entire document	11, 21
Y	US 2004/0075312 A1 (NEALE) 22 April 2004 (22.04.2004) entire document	22, 23
Y	US 6,382,548 B1 (NISHIZAWA et al) 07 May 2002 (07.05.2002) entire document	7, 17

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"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 29 April 2007	Date of mailing of the international search report 11 JUL 2007
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Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	Authorized officer: Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774
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