Child restraint system and method for monitoring installation of the child restraint system.

Abstract: A child restraint system and a method for monitoring installation of the child restraint system are provided. The child restraint system includes a child seat configured to receive a child occupant. The child seat has at least a first seat belt guide member configured to engage a vehicle seat belt webbing for securing the child seat to a vehicle seat. The child restraint system further includes a first sensor coupled to the first seat belt guide member. The first sensor is configured to output a first signal indicative of an amount of tension being applied to the vehicle seat belt webbing. The child restraint system further includes a controller coupled to the child seat configured to receive the first signal and to compute a first tension value based on the first signal. The controller further is configured to induce a first device disposed on the child seat to indicate when the first tension value is less than a predetermined tension value.
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, 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).

Published: with international search report

Date of publication of the international search report: 16 April 2009
# INTERNATIONAL SEARCH REPORT

**International application No.**

PCT/US05/20041

## A. CLASSIFICATION OF SUBJECT MATTER

**IPC:**

A47C 1/08(2006.01); B60R 21/00(2006.01)

**USPC:**

297/250.1, 468, 483, 217.3, 217.2

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)

U.S.: 297/250.1, 468, 483, 217.3, 217.2

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)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
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<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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<td>Y</td>
<td>US 5,181,773 (COLVIN) 26 January 1993, entire document.</td>
<td>3, 6-7, 14, 18</td>
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<td>Y</td>
<td>US 6, 809, 643 B1 (ELROD) 26 October 2004, entire document.</td>
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<EntryBox:
  Further documents are listed in the continuation of Box C.>

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  See patent family annex.>

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<td>earlier application or patent published on or after the international filing date</td>
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<td>document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td>
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<tr>
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Date of the actual completion of the international search

22 January 2008 (22.01.2008)

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

Date of mailing of the international search report

11 FEB 2008

Authorized officer

Sarah McPartlin

Telephone No. 571-272-6854

Form PCT/ISA/210 (second sheet) (April 2007)