



(43) International Publication Date
18 October 2012 (18.10.2012)

- (51) International Patent Classification:
E01F 15/02 (2006.01) *E01F 15/08* (2006.01)
- (21) International Application Number:
PCT/IL2012/000160
- (22) International Filing Date:
15 April 2012 (15.04.2012)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
212288 13 April 2011 (13.04.2011) IL
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- (81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,

MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ,
OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD,
SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

- (84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ,
UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU,
TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE,
DK, 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, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- 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))

- (88) Date of publication of the international search report:
28 March 2013

(54) Title: SAFETY CRASH BARRIER

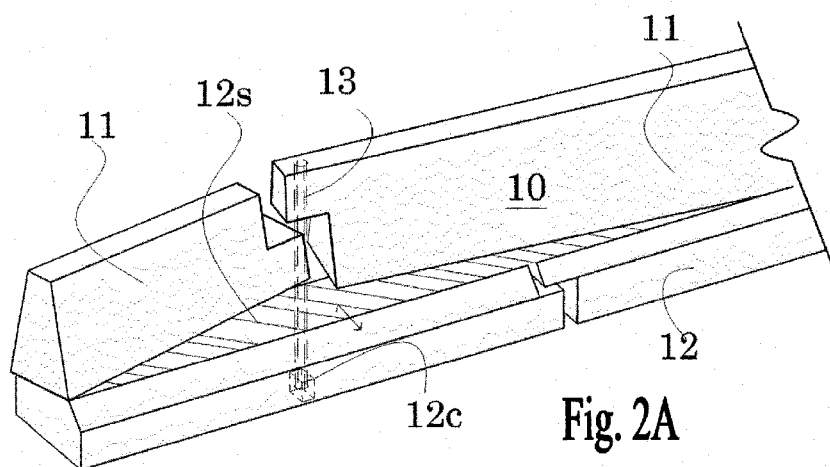


Fig. 2A

(57) **Abstract:** Safety crash barrier comprising an elongated base portion (12) and a plurality of barrier elements (11) movably coupled in a resting state thereof to and along the base portion, the plurality of barrier elements are configured to flexibly or elastically change into a displaced state in which at least some of said barrier elements contacted by a colliding vehicle are caused to move and absorb impact energy imparted by the vehicle so as to stop movement of the vehicle or deflect it back to its lane, to thereby reduce or prevent damages to the vehicle and/or passengers injuries. In some embodiments of the present invention a structure of a plurality of barrier modules is slidably placed on top of the base portion, the plurality of barrier modules are placed one on top the other and configured to horizontally slide one relative the other in response to impact of a colliding vehicle contacting the barrier.

INTERNATIONAL SEARCH REPORT

International application No

PCT/IL2012/000160

A. CLASSIFICATION OF SUBJECT MATTER

INV. E01F15/02 E01F15/08
ADD.

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)
E01F

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)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 2002 275844 A (KUSATAKE SUGIAKI) 25 September 2002 (2002-09-25)	1-5, 8-10,16, 17,19, 20,24,25
Y	the whole document	6,7,18, 21-23, 26-28
Y	----- US 7 722 282 B2 (MEIDAN YORAM [IL]) 25 May 2010 (2010-05-25) cited in the application the whole document	6,7,18, 21-23, 26-28
X	----- US 5 685 665 A (LEMBO M CARL [US]) 11 November 1997 (1997-11-11) column 2, lines 51-58 column 4, line 26 - line 41 column 5, line 4 - line 48; figures 1-4 ----- -/-	1,2,4



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

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"O" document referring to an oral disclosure, use, exhibition or other means

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

31 August 2012

Date of mailing of the international search report

24/01/2013

Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

International application No

PCT/IL2012/000160

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2009 221747 A (YOSHIDA KOZO DESIGN KK) 1 October 2009 (2009-10-01) paragraph [0006] - paragraph [0013]; figures 1-4 -----	9

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IL2012/000160

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

see additional sheet(s)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-28

safety barrier comprising a base and movably coupled barrier elements

1.1. claims: 25-28

method for establishing a safety barrier comprising a base and movably coupled barrier elements

2. claims: 29-32

method of improving an existing stepped barrier

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IL2012/000160

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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