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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, BN, 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, IR, IS, JP, KE, KG, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, 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.

[Continued on nextpage]

(54) **Title:** SYSTEM FOR IMAGING

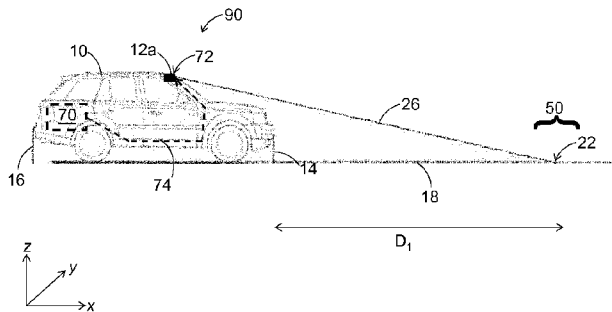


FIGURE 1

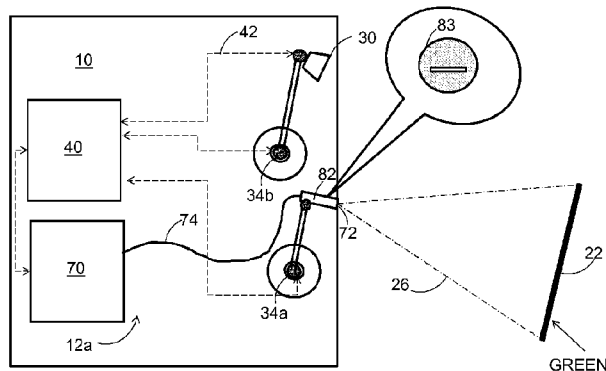


FIGURE 2

(57) **Abstract:** A system (90) for emitting shaped light (26) from a vehicle (10) and for projecting the shaped light (26) onto a surface (18) external to the vehicle (10), the system comprising a controller, one or more light sources and at least one light emitter, wherein the at least one light emitter is arranged to emit at least a first light signal directed towards said surface (18) external to the vehicle (10), the light emitter comprising a projection head arranged to direct light externally to the vehicle (10) and a beam shaper element, wherein the at least one light emitter is coupled to at least one of said light sources by one or more optical fibres.

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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:

18 June 2015

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2014/068688

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.: 5¹
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:
see FURTHER INFORMATION sheet PCT/ISA/21Q

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.:
1-14

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.

INTERNATIONAL SEARCH REPORT

International application No PCT/EP2014/068688

A. CLASSIFICATION OF SUBJECT MATTER INV. B60Q1/50 B60Q1/00 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) B60Q		
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	WO 2011/029673 A1 (SIEMENS AG [DE] ; ECKL ROLAND [DE]; JAEGER MICHAEL [DE]) 17 March 2011 (2011-03-17) page 2 , line 30 - page 4 , line 35; figures -----	1-14
X	US 2010/295670 A1 (SATO YOSHIHISA [JP] ET AL) 25 November 2010 (2010-11-25) paragraphs [0068] - [0086], [0175] - [0190]; figures -----	1-6,8,9, 11,12,14
X	GB 2 342 212 A (DELPHI AUTOMOTIVE SYSTEMS GMBH [DE]) 5 April 2000 (2000-04-05) page 2 , line 15 - page 3 , line 26; figures -----	1-5,8, 11,12,14
X	EP 1 442 927 A1 (VALEO VISION [FR]) 4 August 2004 (2004-08-04) paragraphs [0021] - [0059]; figures -----	1-3,8, 10-12,14
<input type="checkbox"/> Further documents are listed in the continuation of Box C.		
<input checked="" type="checkbox"/> 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 "L" 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) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "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	Date of mailing of the international search report	
22 January 2015	28/04/2015	
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Sal lard, Fabrice	

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/EP2014/068688

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
wo 2011029673	AI	17-03-2011	NONE
US 2010295670	AI	25--11--2010	CN 101730635 A 09-06-2010
			DE 112007003262 T5 07-01-2010
			JP 4930315 B2 16-05-2012
			JP 2008195375 A 28-08-2008
			KR 20090092330 A 31-08-2009
			US 2010295670 AI 25-11-2010
			Wo 2008087832 AI 24-07-2008
GB 2342212	A	05--04--2000	NONE
EP 1442927	AI	04--08--2004	AT 400470 T 15-07-2008
			EP 1442927 AI 04-08-2004
			FR 2850616 AI 06-08-2004
			JP 2004231178 A 19-08-2004
			US 2004252516 AI 16-12-2004
			US 2006245199 AI 02-11-2006

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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

1. claims: 1-14

A system (and a vehicle comprising such a system) for emitting and projecting a shaped light onto a surface external to a vehicle, at least one light emitter being coupled to at least one light source by one or more optical fibres.

Problem to be solved: To improve the installation within the vehicle of an external shaped light projector.

2. claims: 15-47(completely) ; 53(partial ly)

A vehicle comprising a system for emitting and projecting a shaped light onto a surface external to a vehicle, said projected shaped light comprising a graphical referencing element indicative of the width or the size of the vehicle, or a distance relative to the vehicle.

Problem to be solved: To assist the driver in judging the space in front of the vehicle.

3. claims: 48-52(completely) ; 53(partial ly)

A method and a system for projecting a visible image external ly of a vehicle, wherein the position in the three-dimensional space of the vehicle is determined and then a shaped light is projected in dependence upon said position .

Problem to be solved: To appropriately position a projected shaped light onto a surface external to the vehicle

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box 11.2

Claims Nos. : 54

According to Rule 6.2 (a) PCT, the technical features of a claim shall not be defined by references to the description or drawings.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guidelines C-IV, 7.2), should the problems which led to the Article 17(2) declaration be overcome.