(19) World Intellectual Property **Organization**

International Bureau





(43) International Publication Date 24 July 2003 (24.07.2003)

PCT

(10) International Publication Number WO 2003/059691 A3

(51) International Patent Classification⁷: 1/26, 1/34, 1/44, 1/50, 1/52, G08B 1/08 B60Q 1/22,

(21) International Application Number:

PCT/US2003/000633

(22) International Filing Date: 9 January 2003 (09.01.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/347,517 11 January 2002 (11.01.2002) US 10/288,119 5 November 2002 (05.11.2002) US

- (71) Applicant and
- (72) Inventor: LAL, Rajiv, S. [US/US]; 1101 Kingswood Drive, Akron, OH 44313 (US).
- (74) Agents: SCHUMACHER, Una et al.; Amin & Turocy, LLP, 1900 E. 9th Street, 24th Floor, National City Center, Cleveland, OH 44114 (US).

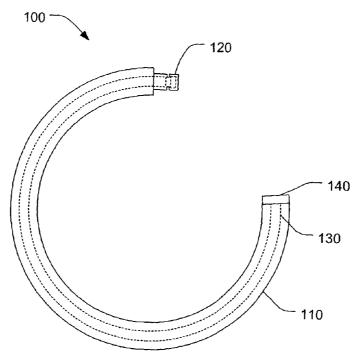
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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

[Continued on next page]

(54) Title: FUNCTIONAL AND ORNAMENTAL VEHICLE ACCESSORIES



(57) Abstract: Systems and methods for a functional and ornamental vehicle accessory are provided. The vehicle accessory includes a housing (110, 810) and a mounting mechanism (200, 830) for coupling the accessory to a vehicle (900, 1000). The vehicle accessory can also include a light source or light conducting member (130). Wiring for electrically connecting the light source can be included such that the vehicle accessory can illuminate during a variety of vehicle functions. The vehicle accessory can also operate as a communication hub for the vehicle (900, 1000).



WO 2003/059691 A3



(88) Date of publication of the international search report: 16 December 2004

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.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/00633

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : B60Q 1/22, 1/26, 1/34, 1/44, 1/50, 1/52; G08B 1/08 US CL : 340/463, 468, 475, 539; 362/80, 83.3, 250 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.: 340/463, 464, 466, 467, 468, 475, 539, 83.3, 250; 362/80, 459, 540, 541				
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				
Category *	Citation of document, with indication, where a	ppropriate, of the relevant passages	Relevant to claim No.	
X	US 6,326,888 B1 (WANG) 04 December 2001, see cols. 2-4.		1-6, 12-25	
X,E	US 6,677,856 B2 (PERLMAN et al) 13 January 2004, cols. 3-20.		26-36	
X	X US 5,939,979 A (LEE) 17 August 1999, cols. 4-10.		7-11, 43-46	
X,E	US 6,657,558 B2 (HORITA et al) 02 December 2003, see entire document,		47-52	
	·	·		
Further	r 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		"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		
"E" earlier ap	plication or patent published on or after the international filing date	"X" document of particular relevance; the considered novel or cannot be consider when the document is taken alone		
"L" document establish specified)	which may throw doubts on priority claim(s) or which is cited to the publication date of another citation or other special reason (as	"Y" document of particular relevance; the considered to involve an inventive step	when the document is	
"O" document	referring to an oral disclosure, use, exhibition or other means	combined with one or more other such being obvious to a person skilled in the		
"P" document published prior to the international filing date but later than the priority date claimed		"&" document member of the same patent family		
Date of the actual completion of the international search 26 October 2004 (26.10.2004)		Date of mailing of the international search report 29' OCT 2004		
Name and mailing address of the ISA/US		Authorized officer		
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450		Jeffery A. Hofsass Telephone No. 703-305-390	nio Zogar	
Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230		Telephone No. 703-305-3900	1/	

Form PCT/ISA/210 (second sheet) (July 1998)

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/00633

INTERNATIONAL SEARCH REPORT	PCT/US03/00633			
BOX II. OBSERVATIONS WHERE UNITY OF INVENTION IS LATThis application contains the following inventions or groups of inventions which inventive concept under PCT Rule 13.1. In order for all inventions to be examilated be paid.	are not so linked as to form a single general			
Generic claims 1-5, 14, 15, 43 drawn to a vehicle accessory.				
Group I, claim(s) 6, 12, 13, 16-36, 44 and 45, drawn to a vehicle accessory with light source.				
Group II, claim(s) 8-11, 46 and 52-59, drawn to a vehicle accessory with end ornament.				
Group III, claim(s) 7, 37-42, 47-51, drawn to vehicle accessory with communication device.				
1. This International Searching Authority considers that the international application does not comply with the requirements of unity of invention (Rules 13.1, 13.2 and 13.3) for the reasons indicated below: The inventions listed as Groups I, II, III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:				
Group I relates to vehicle signaling system.				
Group II relates to vehicle accessory with end ornament.				
Group III relates vehicle accessory with communication device.				