



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
21.03.2007 Bulletin 2007/12

(51) Int Cl.:
E01F 9/00 (2006.01) **E01F 9/03** (2006.01)
E01F 9/08 (2006.01)

(43) Date of publication A2:
08.03.2006 Bulletin 2006/10

(21) Application number: **05110698.7**

(22) Date of filing: **27.10.1999**

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE**

(30) Priority: **19.07.1999 EP 99202378**

(62) Document number(s) of the earlier application(s) in
accordance with Art. 76 EPC:
99970139.4 / 1 099 028

(71) Applicant: **Koninklijke Philips Electronics N.V.
5621 BA Eindhoven (NL)**

(72) Inventors:
• **CUSTERS, Adrianus, C., W.**
5600 AE, Eindhoven (NL)
• **PROVO KLUIT, Pieter, W., C.**
5600 AE, Eindhoven (NL)

- **DEN DULK, Jacob, C., P.**
5600 AE, Eindhoven (NL)
- **MEEKES, Gabrielle, J., B., M.**
5600 AE, Eindhoven (NL)
- **KRUIJT, Wanda, S.**
5600 AE, Eindhoven (NL)
- **VAN DER POEL, Lucas, L., D.**
5600 AE, Eindhoven (NL)
- **SOOLS, Franciscus, G., P.**
5600 AE, Eindhoven (NL)
- **SAALBERG-SEPPEEN, Constance, J., E.**
5600 AE, Eindhoven (NL)

(74) Representative: **Pet, Robert Jacob
Philips
Intellectual Property & Standards
P.O. Box 220
5600 AE Eindhoven (NL)**

(54) **Road-marking complex and system for marking roads**

(57) A road-marking complex comprises at least a first road-marking unit with a first base plate provided with at least a first light source (21, 21', ...) and at least a second road-marking unit with a second base plate provided with at least a second light source (22, 22', ...). In a plane which includes an angle of $0.1 \leq \alpha \leq 8^\circ$ with a line which interconnects the first and the second light source (21, 21', ...; 22, 22', ...), light beams originating from the first and the second light source (21, 21', ...; 22, 22', ...) demonstrate a uniform overlap in said plane at a distance ≥ 40 m from the first light source (21, 21', ...). Preferably, the distance d between the first light source and the second light source lies in the range from $10 \leq d \leq 25$ cm. Preferably, the first and the second base plate of the road-marking units are integrated so as to form a base module (10). Preferably, the base module is provided with means (71, 71', ...; 72, 72', ...; 73, 73', ...) to enhance the rigidity of the base module (10). Preferably, the base module (10) is provided with ascending guiding surfaces (46, 46', ...; 56, 56') to protect the light sources (21, 21', ...; 22, 22', ...).

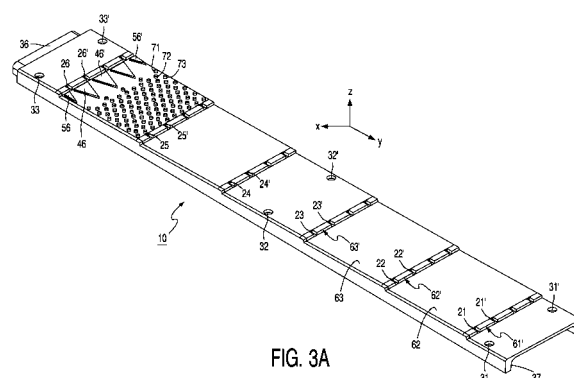


FIG. 3A



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 05 11 0698

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	JP 10 025718 A (EBAAMINTO KK) 27 January 1998 (1998-01-27) * the whole document *	1-3,7,9, 12,14, 21,22	INV. E01F9/00 E01F9/03 E01F9/08
X	DE 31 44 577 A1 (RUBINIC RUDOLF) 19 May 1983 (1983-05-19) * page 11, lines 1-17; figures 1-4 *	1,3,9, 21,22	
X	US 5 134 393 A (HENSON H KEITH [US]) 28 July 1992 (1992-07-28) * column 6, lines 12-52; figures 1-3 *	1,2,9, 21,22	
A	US 3 836 275 A (FINCH D) 17 September 1974 (1974-09-17) * column 3, line 58 - column 4, line 34; figures 1,7 *		
D,A	WO 87/04230 A (SECRETARY TRANSPORT BRIT [GB]) 16 July 1987 (1987-07-16) * the whole document *		
A	EP 0 539 615 A (DAITO SANGYO CO LTD [JP]; NIPPO CO LTD [JP]) 5 May 1993 (1993-05-05)		TECHNICAL FIELDS SEARCHED (IPC) E01F
A	EP 0 422 695 A2 (MINNESOTA MINING & MFG [US]) 17 April 1991 (1991-04-17)		
A	GB 2 159 559 A (BRIGGS EDWARD MCDONALD) 4 December 1985 (1985-12-04)		
A	GB 1 125 569 A (SYLVANIA ELECTRIC PROD) 28 August 1968 (1968-08-28)		
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 8 February 2007	Examiner FLORES HOKKANEN, P
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

4

EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 05 11 0698

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

08-02-2007

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 10025718	A	27-01-1998	NONE	
DE 3144577	A1	19-05-1983	NONE	
US 5134393	A	28-07-1992	NONE	
US 3836275	A	17-09-1974	NONE	
WO 8704230	A	16-07-1987	EP 0258269 A1	09-03-1988
EP 0539615	A	05-05-1993	NONE	
EP 0422695	A2	17-04-1991	AT 85822 T EP 0422694 A2	15-03-1993 17-04-1991
GB 2159559	A	04-12-1985	NONE	
GB 1125569	A	28-08-1968	US 3331956 A	18-07-1967