(1) Publication number:

0 159 068 A3

12)

EUROPEAN PATENT APPLICATION

21) Application number: 85200430.8

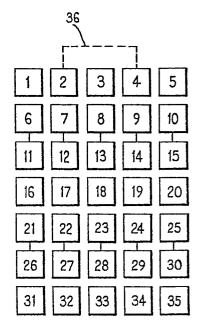
(f) Int. Cl.4: G 09 G 3/18

② Date of filing: 20.03.85

- 30 Priority: 26.03.84 GB 8407788
- 43 Date of publication of application: 23.10.85 Bulletin 85/43
- 84 Designated Contracting States: CH DE FR GB LI SE
- Bate of deferred publication of search report: 28.09.88 Bulletin 88/39

- (7) Applicant: PHILIPS ELECTRONIC AND ASSOCIATED INDUSTRIES LIMITED, Philips House 188 Tottenham Court Road, London W1P 9LE (GB)
- (84) Designated Contracting States: GB
- Applicant: N.V. Philips' Gloellampenfabrieken, Groenewoudseweg 1, NL-5621 BA Eindhoven (NL)
- 84 Designated Contracting States: CH DE FR LI SE
- (2) Inventor: Philips, Ian, TMC LIMITED Swindon Road, Malmesbury Wiltshire (GB) Inventor: Mulkerrin, Robert Anthony, TMC LIMITED Swindon Road, Malmesbury Wiltshire (GB)
- (A) Representative: Andrews, Arthur Stanley et al, PHILIPS ELECTRONICS Patents and Trade Marks Department Centre Point New Oxford Street, London WC1A 1QJ (GB)
- 64 Alpha-numeric display device and visual display arrangement employing such devices.
- ⑤ An alpha-numeric display device comprises seven rows of five elements (1–35) in which each element (6–10) of the secod row is connected to the corresponding element (11–15) in the third row so that a signle singal controls both element. Similarly each element (21–25) in the fifth row is connected to the corresponding element (26–30) in the sixth row. In addition the second element (2) in the first row may be connected (36) to the fourth element (4) in the first row. A full alpha-numeric character set may be generated by appropriately energising selected elements. Since the display device effectively comprises either twenty four or twenty five elements rather than thirty five elements the number of electrical connections required is reduced. In addition the quantity of information required to be stored to drive the display is also reduced.

The elements (1–35) may be formed as liquid crystal cells and a plurality of devices may be formed into a multicharacter display arrangement. When addressing the display devices in matrix form either a five row by five column matrix or two four row by three column matrices may be used depending on whether the link (36) between the second (2) and fourth (4) elements of the first row is provided.





EUROPEAN SEARCH REPORT

EP 85 20 0430

Category	Citation of document with i	ndication, where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
A	US-A-4 233 602 (HANMURA). * Figures 6,8-10; column 4, line 54 - column 5, line 3; column 5, line 67 - column 6, line 30 *		1,3	G 09 G 3/18
A	DE-A-2 757 555 (BBC AG BROWN, BOVERI & CIE) * Figures 3,4; page 14, lines 17-29; page 15, lines 6-16; page 16, lines 25-28; figures 9,10,13 *		1-6	
A	IBM TECHNICAL DISCLOSURE BULLETIN, vol. 25, no. 1, June 1982, pages 381-385, New York, US; J.C. EDWARDS et al.: "Limited element fonts" * Page 381, first paragraph; page 385, last paragraph; figures 1,6 *		1,3	
A	US-A-4 198 629 (MARION) * Figures 5,7B,8; column 13, lines 34-66; column 16, lines 3-19 *		1	TECHNICAL FIELDS SEARCHED (Int. Cl.4)
A	EP-A-0 386 551 (NATIONAL RESEARCH DEVELOPMENT CORP.)			G 09 G G 09 F
E	EP-A-O 164 152 (NV GLOEILAMPENFABRIEKE * Claims 1,2; page	N)	1-5	G 02 F
	The present search report has b			
Place of search THE HAGUE		Date of completion of the search $30-06-1988$	TIB	Examiner AUX M.J.P.G.
CATEGORY OF CITED DOCUMENTS: X: particularly relevant if taken alone Y: particularly relevant if combined with and document of the same category A: technological background O: non-written disclosure		NTS T: theory or print E: earlier patent after the filing ther D: document cit L: document cit	y or principle underlying the invention er patent document, but published on, or the filing date ment cited in the application ment cited for other reasons ber of the same patent family, corresponding	