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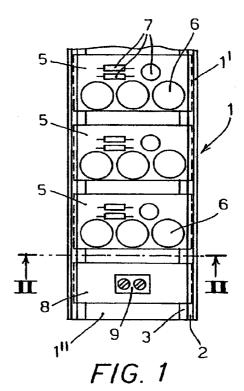
F.G.E. di Fuca' Giacomo 10146 Torino (IT) (72) Inventor: Fuca', Giacomo 10146 Torino (IT)

(11)

(74) Representative: Robba, Pierpaolo Interpatent, Via Caboto 35 10129 Torino (IT)

(54) Lighting device with variable pitch

(57) A lighting device with a variable pitch, comprising: a raceway (1) having an elongated U-shaped cross section, internally provided with guides (4) adapted to retain boards (5), each of said boards carrying a plurality of LEDs (6) and to allow a longitudinal translation of said boards along the raceway, a pair of electrically conductive strips (3) being internally provided on the base of said raceway (1), said boards further providing for a pair of electrical contacts (10a) each corresponding to one of said conductive strips (3), whereby an electrical connection is established between each of said pair of strips and each of said pair of contacts at any locations of said boards (5) along said raceway.





EUROPEAN SEARCH REPORT

Application Number EP 99 10 1286

| Category | Citation of document with of relevant pas | ndication, where appropriate, sages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (Int.Ci.6) | | |
|--|---|--|---|--|--|--|
| X Y | EP 0 460 276 A (LIN 11 December 1991 (1 * column 3, line 5- | 1991–12–11) | 1,3 | F2103/00 F21K7/00 F21V23/00 F21P1/00 F21V21/34 | | |
| X | PATENT ABSTRACTS OF vol. 014, no. 049 (29 January 1990 (19 & JP 01 276505 A (8 7 November 1989 (19 * abstract * | (M-0927), 990-01-29) EE B C SHOKAI:KK), | 1 | G09F13/04 | | |
| A Y | US 4 471 415 A (LAF 11 September 1984 (* column 2, line 39 | | 2 | | | |
| A | & C) 23 July 1992 (* abstract * | | 1 | | | |
| Υ | * column 2, line 25 | -54; figures 1,2 * | 4 | TECHNICAL FIELDS SEARCHED (Int.CI.6) | | |
| A | US 5 655 833 A (RAC 12 August 1997 (199 * column 3, line 65 figure 3 * | | 1 | F21P F21V F21Q F21K G09F | | |
| Y | | | 6 | | | |
| A | US 4 884 178 A (ROE 28 November 1989 (1 * column 2, line 28 | 989-11-28) | 1 | | | |
| | The present search report has Place of search THE HAGUE | been drawn up for all claims Date of completion of the search 22 January 2001 | Bus | Examiner to, M | | |
| X : part Y : part doci | icularly relevant if combined with and ument of the same category | T: theory or princip E: earlier patent to after the filing de ther D: document cited t L: document cited t | le underlying the cument, but publite in the application or other reasons | invention ished on, or | | |
| 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 | | ther D : document cited L : document cited t | after the filing date D: document cited in the application L: document cited for other reasons &: member of the same patent family, corresponding document | | | |

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

EP 99 10 1286

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

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22-01-2001

| Patent document cited in search report | | Publication date | Patent family member(s) | | Publication date | |
|--|----------|------------------|-------------------------|----------|---|--------------------------|
| EP | 0460276 | A | 11-12-1991 | US US | 4999755 A 5113329 A | 12-03-1991 12-05-1992 |
| JP | 01276505 | A | 07-11-1989 | JP | 2578356 B | 05-02-1997 |
| US | 4471415 | A | 11-09-1984 | NONE | | |
| DE | 4101041 | A | 23-07-1992 | DE | 4032622 A | 16-04-1992 |
| US | 5655833 | Α | 12-08-1997 | NONE | | |
| us | 4884178 | A | 28-11-1989 | NONE | ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ | |

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

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