

Title (en)  
LUMINOUS FIBRE MATRIX DISPLAY

Publication  
**EP 0109328 B1 19880107 (FR)**

Application  
**EP 83402115 A 19831028**

Priority  
FR 8218625 A 19821105

Abstract (en)  
[origin: EP0109328A1] 1. Display matrix (1) formed by the downstream ends (2) of an assembly of optical fibers (3) whose upstream ends are placed so as to receive light from a light source, of the type in which the optical fibers (3) are associated individually or in very small assemblies with electromechanical occultating devices (6) placed at the front of the downstream end (2) of the fibers in question (3) and capable of modifying the color and/or intensity of the light emitted to the front of the matrix, and devices (13) controlling the occultating devices (6) making it possible selectively to control the occulting of determined groups of fibers so as to transform the display as desired, characterized in that each occulting device comprises a disc (6) containing different occulting sectors (8, 9, 10) capable of being interposed on the path of light, as a function of a rotation controlled by the control device (13), each disc being driven in rotation by a rotary motor with two positions of stable equilibrium, the rotation of which being controlled by current pulses, and in that the motor comprises a rotor (14) rotating freely about an axis (7) and constituted by a small permanent magnet with two poles oriented radially with respect to the axis (7), a stator (15) formed by a circuit magnetizable by pulse made of a material having good remanence, presenting two poles (16, 17; 16', 17') diametrically opposite with respect to the axis (7) of the rotor, the stator comprising near each of its poles an indexing element (18, 19; 18', 19') non-aligned with said poles of the stator adapted to destabilize the position of the rotor at the moment of a pulse.

IPC 1-7  
**G09F 9/30**

IPC 8 full level  
**G09F 9/30** (2006.01); **G09F 9/305** (2006.01)

CPC (source: EP)  
**G09F 9/305** (2013.01)

Cited by  
US4833806A; US5022171A; DE4437675A1; DE4437675C2; FR2634933A1; EP0397917A3; EP0401980A3; USRE35357E; CN112269326A; EP0467035A1; US4974353A

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**EP 0109328 A1 19840523; EP 0109328 B1 19880107**; AT E31834 T1 19880115; DE 3375241 D1 19880211; DK 163614 B 19920316; DK 163614 C 19920824; DK 506383 A 19840506; DK 506383 D0 19831104; FR 2535882 A1 19840511; FR 2535882 B1 19870828

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