

P2247/CBD
9606351-6

(12) UK Patent Application (19) GB (11) 2 286 467 (13) A

(43) Date of A Publication 16.08.1995

(21) Application No 9502684.7

(22) Date of Filing 08.02.1995

(30) Priority Data

(31) 9402513

(32) 09.02.1994

(33) GB

(71) Applicant(s)

The Secretary of State for Defence
Defence Research Agency, FARNBOROUGH, Hants,
GU14 7TD, United Kingdom

(72) Inventor(s)

Guy Peter Bryan-Brown
Michael John Towler
Damien Gerard McDonnell
Martin Stuart Bancroft

(74) Agent and/or Address for Service

R W Beckham
Defence Research Agency, Intellectual Property Dept,
Room 2014, Empress State Building, Lillie Road,
LONDON, SW6 1TR, United Kingdom

(51) INT CL⁶

G02F 1/1337 1/137

IPDSS

copy.

(52) UK CL (Edition N)

G2F FCT F23E F24T F25F F28M

(56) Documents Cited

WO 92/00546 A2 US 4333708 A

(58) Field of Search

UK CL (Edition N) G2F FCD FCT

INT CL⁶ G02F 1/1337 1/137

ONLINE: CLAIMS, INSPEC, JAPIO, WPI

(54) Bistable nematic liquid crystal device

(57) A bistable nematic liquid crystal cell is provided with a bigrating on at least one cell wall. The bigrating is a grating or shaped surface that permits liquid crystal molecules to lie in two different angular directions, eg 45° or 90° apart. The bigratings may be symmetric or asymmetric, in which latter case an amount of surface tilt is obtained. Appropriate surface tilt on both cell walls may give a spaced molecular configuration in both switched states and enable flexoelectric coupling to be employed. Alternatively, chiral ions may be included in the liquid crystal and the cell switched by the use of DC pulses.

REPLACED SHEETS		SG
☒	Description : paged 1 to paged 19	
☒	Claim(s) : paged 20 to paged 21	
☒	Drawing(s) : paged 1 to paged 5	
☒	Abstract : paged to paged	
DATE OF RECEIPT		

This Sheet Has Been Replaced



GB 2 286 467 A