

## 4 Documents

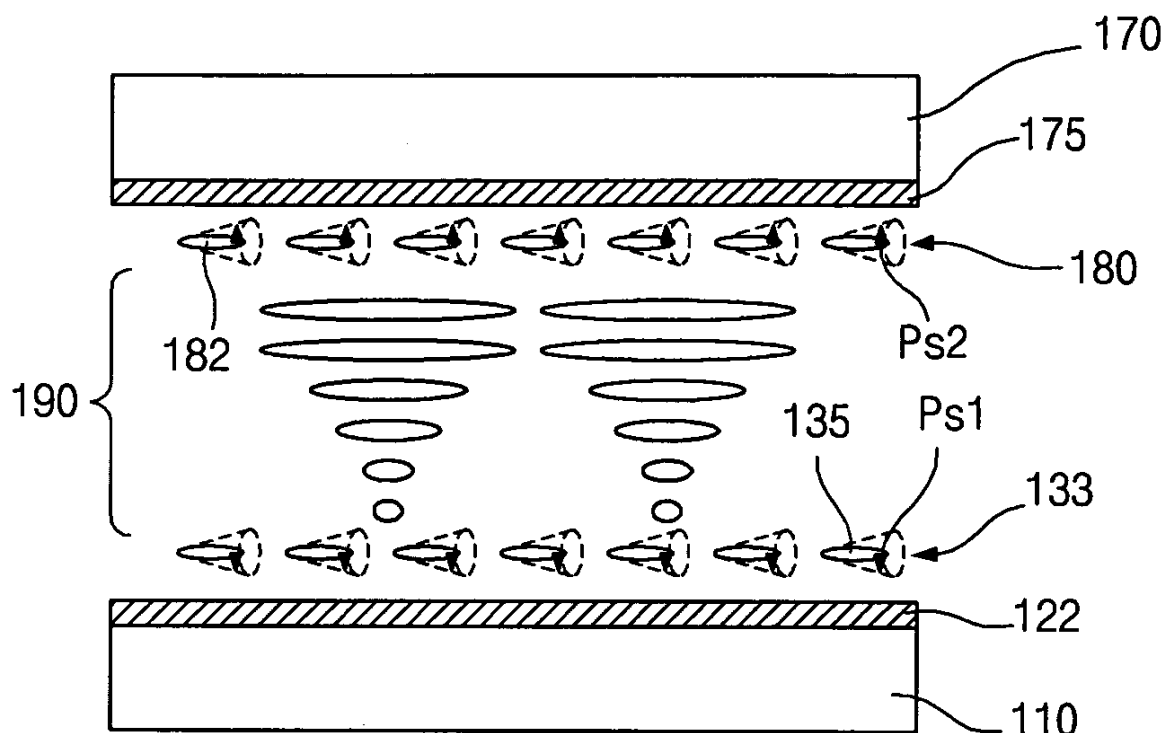
| Publication numbers               | Title                                                                                                                                                                                   | Current assignees                                |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| <a href="#">CN1797148 A</a>       | Fabrication method of in-plane switching mode liquid crystal display device including twisted nematic liquid crystal layer between first and second ferroelectric liquid crystal layers | LG DISPLAY                                       |
| <a href="#">WO200562389 A2</a>    | Semiconductor light emitting device and lighting module                                                                                                                                 | PANASONIC<br>INTELLECTUAL PROPERTY<br>MANAGEMENT |
| <a href="#">DE202004017411 U1</a> | Liquid crystal display device                                                                                                                                                           | ELEMENT DISPLAYS DR<br>WIEMER                    |
| <a href="#">CN2392233U Y</a>      | Long lasting light type luminescence label                                                                                                                                              | WEI JIANHUA                                      |

Family 1/4 - FAMPAT - ©Questel

**Title**

(US7999909)

Fabrication method of in-plane switching mode liquid crystal display device including twisted nematic liquid crystal layer between first and second ferroelectric liquid crystal layers

**Images****Publication data including kind & date**

|                               |    |            |               |
|-------------------------------|----|------------|---------------|
| <a href="#">CN1797148</a>     | A  | 2006-07-05 | CN1797148     |
| <a href="#">KR20060077950</a> | A  | 2006-07-05 | KR20060077950 |
| <a href="#">US20060146249</a> | A1 | 2006-07-06 | US20060146249 |
| <a href="#">JP2006189771</a>  | A  | 2006-07-20 | JP2006189771  |
| <a href="#">US7787088</a>     | B2 | 2010-08-31 | US7787088     |
| <a href="#">US20100285613</a> | A1 | 2010-11-11 | US20100285613 |
| <a href="#">US7999909</a>     | B2 | 2011-08-16 | US7999909     |
| <a href="#">KR101066028</a>   | B1 | 2011-09-20 | KR101066028   |

**Abstract**

(US7999909)

An in-plane switching mode liquid crystal display device includes a first substrate including a pixel electrode in a pixel region, a second substrate facing the first substrate and including a common electrode, a first alignment layer on the pixel electrode, a second alignment layer on the common electrode, a first ferroelectric liquid crystal layer on the first alignment layer and including a first spontaneous polarization, a second ferroelectric liquid crystal layer on the second alignment layer and including a second spontaneous polarization, a rotational direction of the first ferroelectric liquid crystal layer with respect to the first alignment layer being different from a rotational direction of the second ferroelectric liquid crystal layer with respect to the second alignment layer, and a twisted nematic liquid crystal layer between the first and second ferroelectric liquid crystal layers.

**Inventors**

CHOI SU-SEOK

Latest standardized assignees - inventors removed

## LG DISPLAY

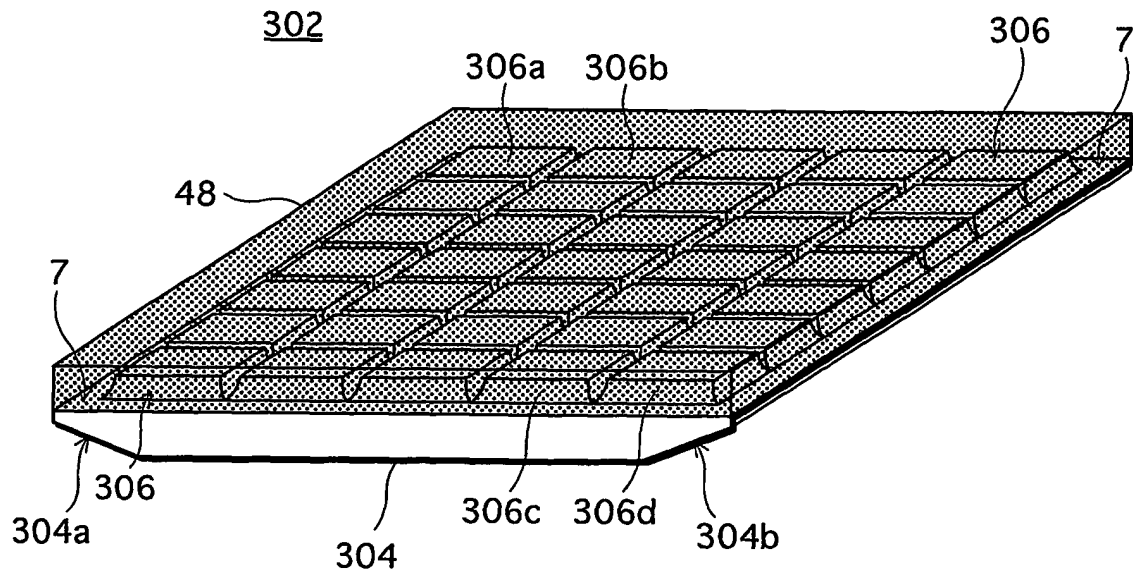
Family 2/4 - FAMPAT - ©Questel

## Title

(EP1700344)

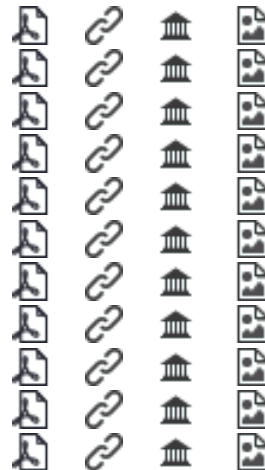
Semiconductor light emitting device and lighting module

## Images



## Publication data including kind &amp; date

|                               |    |            |               |
|-------------------------------|----|------------|---------------|
| <a href="#">WO2005062389</a>  | A2 | 2005-07-07 | WO200562389   |
| <a href="#">TW200527722</a>   | A  | 2005-08-16 | TW200527722   |
| <a href="#">WO2005062389</a>  | A3 | 2006-02-09 | WO200562389   |
| <a href="#">EP1700344</a>     | A2 | 2006-09-13 | EP1700344     |
| <a href="#">US20070102693</a> | A1 | 2007-05-10 | US20070102693 |
| <a href="#">JP2007517378</a>  | A  | 2007-06-28 | JP2007517378  |
| <a href="#">US20090134420</a> | A1 | 2009-05-28 | US20090134420 |
| <a href="#">US7755095</a>     | B2 | 2010-07-13 | US7755095     |
| <a href="#">US7880185</a>     | B2 | 2011-02-01 | US7880185     |
| <a href="#">TWI360900</a>     | B  | 2012-03-21 | TWI360900     |
| <a href="#">EP1700344</a>     | B1 | 2016-03-02 | EP1700344     |



## Abstract

(EP1700344)

In an LED array chip (2), LEDs (6) are connected together in series by a bridging wire (30). The LEDs (6) each have a semiconductor multilayer structure (8-18) including a light emitting layer (14). Here, the semiconductor multilayer structure (8-18) is epitaxially grown on a front surface of an SiC substrate (4). A phosphor film (48) covers the LEDs (6). Two power supply terminals (36 and 38), which are electrically independent from each other, are formed on a back surface of the SiC substrate (4). The power supply terminal (36) is connected to a cathode electrode (32) of an LED (6a) at a lower potential end by a bridging wire (40) and a plated-through hole (42). The power supply terminal (38) is connected to an anode electrode (34) of an LED (6d) at a higher potential end by a bridging wire (44) and a plated-through hole (46).

## Inventors

NAGAI HIDEO

Latest standardized assignees - inventors removed



**Abstract**

(EP1812820)

The invention relates to a liquid crystal display comprising a multi-layered display unit (1) which is introduced into a housing (20). Said unit comprises, in a successive manner from the visible side to the rear side, a front polarisation filter (11), a liquid crystal layer (12), a rear polarisation filter (13) and a diffusion layer (14) or retro-reflection layer, optionally, with additional layers (15, 16). High luminosity is achieved by virtue of the fact that the diffusion layer or the retro-reflection layer are provided with fluorescent colours (14.1).

**Inventors**

WIEMER WOLFRAM

BOEHM ARNO

**Latest standardized assignees - inventors removed**

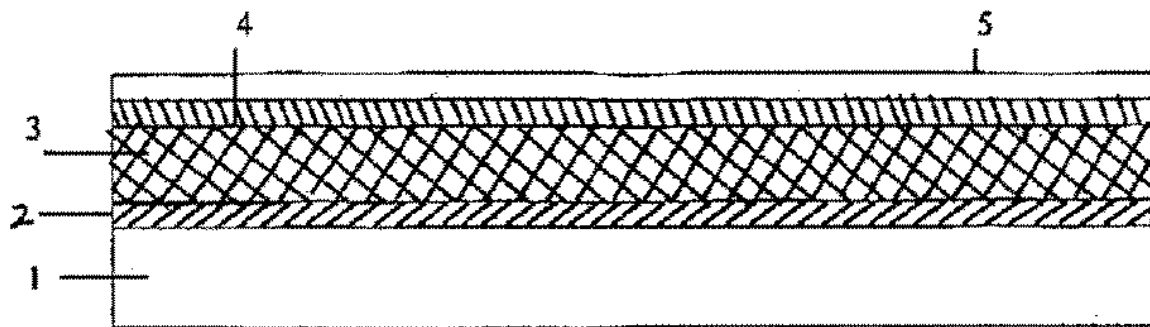
ELEMENT DISPLAYS DR WIEMER

Family 4/4 - FAMPAT - ©Questel

**Title**

(CN2392233U)

Long lasting light type luminescence label

**Images****Publication data including kind & date**[CN2392233](#)

Y

2000-08-16

CN2392233U

**Abstract**

(CN2392233U)

The utility model provides a long lasting light type luminescence label. The utility model is characterized in that on the basis of the structure of the existing label, a long lasting light agent coating layer is additionally arranged on a corresponding position to cause the original non-luminous label to become a label which can emit light under a non-luminous condition or cause the original non-luminous label to become a luminescence label.

**Inventors**

QIN SUMEI

**Latest standardized assignees - inventors removed**

WEI JIANHUA