

Title (en)
MULTICOLOR ELECTROLUMINESCENT ELEMENT

Title (de)
MEHRFARB-ELEKTROLUMINESZENZ-ELEMENT

Title (fr)
ELEMENT ELECTROLUMINESCENT MULTICOLORE

Publication
EP 1738614 A1 20070103 (DE)

Application
EP 05735675 A 20050404

Priority
• EP 2005003535 W 20050404
• DE 102004019611 A 20040422

Abstract (en)
[origin: WO2005107333A1] The electroluminescent (EL) element comprises a transparent plastic film substrate (1) onto whose rear side a transparent first electrode layer (2) comprised of indium tin oxide (ITO) is vacuum sputtered. A first electroluminescent layer (3) with dispersed electroluminophores (4) is placed on the first electrode layer (2). This first electroluminescent layer consists of a transparent matrix (5) into which the electroluminophores (4) are incorporated (4). The second electrode layer (rear electrode layer) (6) is placed on the first electroluminescent layer (3) or on an insulating intermediate layer (not shown) located thereon. This second electrode layer is insulated toward its side facing away from the first electroluminescent layer (3) by means of the insulating layer (7). On the front side, i.e. the visible face, a third electrode layer (8) comprised of transparent conductive lacquer is applied to the plastic film substrate (1). A second electroluminescent layer (9) with dispersed electroluminophores (4) is placed on the third electrode layer (8). The fourth electrode layer (10) comprised of transparent conductive lacquer is placed on said second electroluminescent layer (9) or on an insulating intermediate layer (not shown) located thereon. This fourth electrode layer (10) is insulated on the visible face by means of an insulating layer (11).

IPC 8 full level
H05B 33/14 (2006.01); **H05B 33/28** (2006.01)

CPC (source: EP US)
H05B 33/145 (2013.01 - EP US); **H05B 33/28** (2013.01 - EP US)

Citation (search report)
See references of WO 2005107333A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2005107333 A1 20051110; AT E478543 T1 20100915; DE 102004019611 A1 20051117; DE 502005010106 D1 20100930;
EP 1738614 A1 20070103; EP 1738614 B1 20100818; US 2007278943 A1 20071206

DOCDB simple family (application)
EP 2005003535 W 20050404; AT 05735675 T 20050404; DE 102004019611 A 20040422; DE 502005010106 T 20050404;
EP 05735675 A 20050404; US 59472105 A 20050404