

Title (en)  
DISPLAY DEVICE USING FIELD EMISSION EXCITED CATHODE LUMINESCENCE

Publication  
**EP 0172089 B1 19900516 (FR)**

Application  
**EP 85401521 A 19850723**

Priority  
FR 8411986 A 19840727

Abstract (en)  
1. Display unit comprising a plurality of elementary patterns each having an anode (20) comprising a cathodoluminescent layer (34), and a cathode (18) able to emit electrons, each cathode comprising a plurality of electrically interconnected micropoints (22) subject to an electron emission by field effect when the cathode is negatively polarized with respect to the corresponding anode, characterized in that each anode (20) is integrated into the corresponding cathode (18) and electrically insulated therefrom, each anode having holes (37) facing micropoints, in such a way that the electrons emitted by the micropoints traverse the holes and then return to the cathodoluminescent layer (34) and strike the latter around the holes (37).

IPC 1-7  
**H01J 29/48; H01J 31/12**

IPC 8 full level  
**G09F 9/313** (2006.01); **G09G 3/22** (2006.01); **H01J 29/04** (2006.01); **H01J 31/12** (2006.01); **H01J 31/15** (2006.01)

CPC (source: EP US)  
**H01J 31/127** (2013.01 - EP US); **H01J 31/15** (2013.01 - EP US)

Citation (examination)  
EP 0155895 A1 19850925 - SURFACES LAB ET SARL [FR]

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US5055077A; US4857161A; US5218273A; US5136764A; US5717285A; US5019003A; EP0616356A1; FR2702869A1; US5075595A; US5079476A; US5461280A; US5140219A; GB2261766B; US5173634A; US5030921A; US5007873A; FR2641108A1; US5432407A; FR2662301A1; EP0385764A1; US5176557A; EP0349425A1; FR2633763A1; US5225820A; US4857799A; EP0713241A3; US5157309A; EP0278405A3; AU631327B2; EP0541394A1; US5587720A; US5173635A; EP0354750A3; US5201681A; US5281890A; US5142184A; US4956574A; EP0272178A1; FR2607623A1; US4835438A; US6236381B1; US6278235B1; US6208072B1; FR2734073A1; FR2734074A1; FR2731101A1; FR2691567A1; EP0557191A1; FR2687841A1; US5394066A; US5148078A; EP0899770A1; US5212426A; US5142256A; EP0513777A3; US5386172A; US5465024A; GB2209432A; US4983878A; GB2209432B; WO8801098A1; WO9610835A1; US6320310B1; US6630782B1; EP0234989B1

Designated contracting state (EPC)  
CH DE GB IT LI NL SE

DOCDB simple family (publication)  
**EP 0172089 A1 19860219; EP 0172089 B1 19900516**; CA 1261911 A 19890926; DE 3577774 D1 19900621; FR 2568394 A1 19860131; FR 2568394 B1 19880212; JP H0614263 B2 19940223; JP S61221783 A 19861002; US 4908539 A 19900313

DOCDB simple family (application)  
**EP 85401521 A 19850723**; CA 487389 A 19850724; DE 3577774 T 19850723; FR 8411986 A 19840727; JP 16560685 A 19850726; US 17788088 A 19880324