

Title (en)
PLASMA DISPLAY DEVICE

Title (de)
PLASMA ANZEIGEVORRICHTUNG

Title (fr)
ECRAN A PLASMA

Publication
EP 0978135 A1 20000209 (EN)

Application
EP 98918705 A 19980424

Priority

- US 9808298 W 19980424
- US 4431097 P 19970425
- US 116797 A 19971230

Abstract (en)
[origin: WO9849706A1] A plasma display having a transparent front panel (622) spaced from a back panel (610) which is a metal core (612) having layers of a dielectric material (614) extending over and bonded to the core. Conductive electrodes (620) are on the surface of or embedded in the dielectric layer of the back panel. The materials of which the back panel is made are chosen to form a back panel having a thermal coefficient of expansion (TCE) compatible with that of the front panel. The dielectric material is made from a green ceramic tape which is bonded to the core and cofired with the core to form the back panel. Barrier ribs (616) are formed on the back panel by embossing or scribing the green tape before cofiring the bonded assembly. Slight differences in the TCEs of the front and back panels may be compensated for by heating the panel having the lower TCE to a temperature hotter than the panel having the higher TCE during the frit seal process. Alternatively, the materials for the dielectric (614) may be chosen such that the composite TCE of the cofired assembly (610) matches the TCE of the front panel.

IPC 1-7
H01J 9/00

IPC 8 full level
H01J 9/14 (2006.01); **H01J 9/20** (2006.01); **H01J 9/24** (2006.01); **H01J 11/02** (2006.01); **H01J 11/34** (2012.01); **H01J 11/38** (2012.01);
H01J 17/16 (2006.01)

CPC (source: EP KR)
H01J 9/20 (2013.01 - EP); **H01J 9/241** (2013.01 - EP); **H01J 9/242** (2013.01 - EP); **H01J 11/34** (2013.01 - EP KR); **H01J 11/38** (2013.01 - KR);
H01J 11/48 (2013.01 - EP)

Designated contracting state (EPC)
DE FR GB NL

DOCDB simple family (publication)
WO 9849706 A1 19981105; AU 7158098 A 19981124; CN 1147898 C 20040428; CN 1252888 A 20000510; EP 0978135 A1 20000209;
EP 0978135 A4 20010207; JP 2001526822 A 20011218; KR 100497786 B1 20050629; KR 20010020269 A 20010315

DOCDB simple family (application)
US 9808298 W 19980424; AU 7158098 A 19980424; CN 98804349 A 19980424; EP 98918705 A 19980424; JP 54718198 A 19980424;
KR 19997009869 A 19991025