

Title (en)  
Plasma display panel with protective layer

Title (de)  
Plasmabildschirm mit Schutzschicht

Title (fr)  
Ecran à plasma avec couche protectrice

Publication  
**EP 1154456 A3 20040714 (DE)**

Application  
**EP 01000140 A 20010509**

Priority  
DE 10023341 A 20000512

Abstract (en)  
[origin: EP1154456A2] Protective layer of the plasma screen is made from crystalline diamond, aluminum nitride, aluminum gallium nitride, boron nitride and tetrahedral amorphous carbon. Plasma screen comprises a front plate (1) with a glass plate (3) on which a dielectric layer (4) and a protective layer (5) are applied; a support plate (2) equipped with a phosphor layer (9); a ribbed structure (12) which divides the space between the front plate and the support plate into plasma cells which are filled with a gas; and electrode arrays (6, 7, 10) arranged on the front plate and the support plate for producing quiet electrical discharges in the plasma cells. Preferred Features: The gas is xenon in an amount of over 7 volume %.

IPC 1-7  
**H01J 17/04**; H01J 17/49; H01J 17/06

IPC 8 full level  
**H01J 11/12** (2012.01); **H01J 11/40** (2012.01)

CPC (source: EP US)  
**H01J 11/12** (2013.01 - EP US); **H01J 11/40** (2013.01 - EP US)

Citation (search report)

- [X] EP 0764965 A2 19970326 - AT & T CORP [US]
- [XP] EP 1085554 A1 20010321 - PHILIPS CORP INTELLECTUAL PTY [DE], et al
- [A] US 5993543 A 19991130 - AOKI MASAKI [JP], et al
- [XD] PATENT ABSTRACTS OF JAPAN vol. 1999, no. 05 31 May 1999 (1999-05-31)
- [A] WEI Q ET AL: "Preparation of superhard functionally graded tetrahedral amorphous carbon coatings by pulsed laser deposition", LASER-SOLID INTERACTIONS FOR MATERIALS PROCESSING, SYMPOSIUM (MATERIALS RESEARCH SOCIETY SYMPOSIUM PROCEEDINGS VOL.617), LASER-SOLID INTERACTIONS FOR MATERIALS PROCESSING. SYMPOSIUM, SAN FRANCISCO, CA, USA, 25-27 APRIL 2000, 2000, Warrendale, PA, USA, Mater. Res. Soc, USA, pages J7.7.1 - 6, XP002271771, ISBN: 1-55899-525-0

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DOCDB simple family (publication)  
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**EP 01000140 A 20010509**; CN 01116942 A 20010509; DE 10023341 A 20000512; JP 2001141082 A 20010511; KR 20010025114 A 20010509; TW 90114411 A 20010614; US 85309901 A 20010510