

Title (en)

SEALING METHOD AND APPARATUS FOR MANUFACTURING HIGH-PERFORMANCE GAS DISCHARGE PANEL

Title (de)

ABDICHTUNGSVERFAHREN UND GERÄT ZUR HERSTELLUNG HOCHLEISTUNGS-GASENTLADUNGSSANZEIGEVORRICHTUNGEN

Title (fr)

PROCEDE ET APPAREIL D'ETANCHEITE POUR LA PRODUCTION D'UN PANNEAU A PLASMA A HAUTE PERFORMANCE

Publication

EP 1114433 B1 20101027 (EN)

Application

EP 99943288 A 19990913

Priority

- JP 9904961 W 19990913
- JP 25988098 A 19980914
- JP 29495398 A 19981016
- JP 6276599 A 19990310
- JP 6640799 A 19990312
- JP 11944699 A 19990427
- JP 12210699 A 19990428

Abstract (en)

[origin: WO0016364A1] A method is provided to steadily produce a gas discharge panel, such as a PDP, in which a panel and the top of the barrier ribs are in intimate contact in entirety. First a surrounding unit for the gas discharge panel is formed, then a process for sealing the surrounding unit with a sealing material inserted between two panels at the rim is performed while pressure is adjusted so that pressure inside the surrounding unit is lower than pressure outside. With this construction, the panels constituting the surrounding unit are bonded together while they are pressurized from outside. As a result, a panel and the top of the barrier ribs on the other panel are bonded together while they are in intimate contact in entirety. To fully acquire these effects, it is preferable that the adjustment of pressure starts before the sealing material hardens. During, before, or after the sealing step, an energy such as laser beams or ultrasonic waves may be radiated onto the top of the barrier ribs to bond a panel and the top of the barrier ribs in entirety almost without a gap between them.

IPC 8 full level

H01J 9/26 (2006.01); **H01J 9/38** (2006.01); **H01J 11/34** (2012.01); **H01J 17/49** (2012.01)

CPC (source: EP KR)

H01J 9/26 (2013.01 - KR); **H01J 9/265** (2013.01 - EP); **H01J 9/38** (2013.01 - EP KR); **H01J 11/12** (2013.01 - EP); **H01J 11/34** (2013.01 - KR); **H01J 11/48** (2013.01 - EP)

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

WO 0016364 A1 20000323; CN 1276457 C 20060920; CN 1328694 A 20011226; DE 69942894 D1 20101209; EP 1114433 A1 20010711; EP 1114433 B1 20101027; KR 100686422 B1 20070223; KR 100707055 B1 20070413; KR 20010079816 A 20010822; KR 20060097769 A 20060915

DOCDB simple family (application)

JP 9904961 W 19990913; CN 99813250 A 19990913; DE 69942894 T 19990913; EP 99943288 A 19990913; KR 20017003259 A 20010314; KR 20067016765 A 20060821