



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |           |                                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>(51) International Patent Classification <sup>6</sup> :</b><br><b>B05D 5/12, 3/02, 1/36, C03C 27/00,</b><br><b>G09G 3/30, 3/32</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>A1</b> | <b>(11) International Publication Number:</b> <b>WO 99/02277</b><br><b>(43) International Publication Date:</b> 21 January 1999 (21.01.99)                                                                                   |
| <b>(21) International Application Number:</b> PCT/US98/14099<br><b>(22) International Filing Date:</b> 9 July 1998 (09.07.98)<br><br><b>(30) Priority Data:</b><br>60/052,357      11 July 1997 (11.07.97)      US<br>09/074,406      8 May 1998 (08.05.98)      US<br><br><b>(71) Applicant:</b> FED CORPORATION [US/US]; Hudson Valley Research Park, 1580 Route 52, Hopewell Junction, NY 12533 (US).<br><br><b>(72) Inventors:</b> JONES, Gary, W.; 8 Taconic View Court, Lagrangeville, NY 12540 (US). HOWARD, Webster, E.; 4 Lee Lane, Lagrangeville, NY 12540 (US). ZIMMERMAN, Steven, M.; 37 Meddaugh Road, Pleasant Valley, NY 12569 (US).<br><br><b>(74) Agent:</b> COYNE, Patrick, J.; Collier, Shannon, Rill & Scott, PLLC, Suite 400, 3050 K Street, N.W., Washington, DC 20007 (US).                                                                            |           | <b>(81) Designated States:</b> CA, CN, IL, JP, KR, NO, RU, SG, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).<br><br><b>Published</b><br><i>With international search report.</i> |
| <b>(54) Title:</b> SEALING STRUCTURE FOR ORGANIC LIGHT EMITTING DEVICES<br><br><div data-bbox="242 1211 1383 1783" data-label="Image"> </div><br><b>(57) Abstract</b><br><p>A sealing structure (190) for an organic light emitting device display (100). The sealing structure (190) comprises a metal film (175) overlying a dielectric film (150). The sealing structure (190) has low moisture and oxygen permeability. At least one of the metal layers (175) may react with moisture or oxygen to seal off pin holes. A net low stress sealing structure (190) may be formed by combining tensile and compressive films. The sealing structure (190) may be etched to create openings (160) for connection to outside circuitry. The innovative sealing structure (190) minimizes moisture leakage and vertical shorts between diode cathode (900) and anode (400).</p> |           |                                                                                                                                                                                                                              |