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**PLASMA - DISPLAY DRIVING**

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Thursday, May 24 / 3:40 - 5:00 pm / Room 103

**Chair:**

Shigeo Mikoshiba, The University of Electro-Communications,  
Tokyo, Japan

**Co-Chair:**

Minsun Yoo, Samsung SDI Co., Ltd., Kyunggi-do, Korea

**55.1: Invited Paper: Solution to Boundary Image Sticking in ACPDPs (3:40)**

*H-S. Tae, C-S. Park*  
*Kyungpook National University, Daegu, Korea*

*Y-K. Kwon, E-G. Heo, B-H. Lee*  
*Samsung SDI Co., Ltd., Chungcheongnam-do, Korea*

Two types of solutions to remove boundary image sticking will be introduced. After the 100-hour full-white aging process of the PDP cells with boundary image sticking, the MgO surface morphology was improved. And in the panel fabricated by the vacuum-sealing method, no boundary image sticking was observed.

**55.2: Dithering Algorithm Using Multi-Threshold Level on PDPs (4:00)**

*T. Nagakubo*  
*Pioneer Corp., Tokyo, Japan*

*N. Tsumura, T. Nakaguchi, Y. Miyaki*  
*Chiba University, Chiba, Japan*

PDPs use digital color halftoning, such as a dithering or error-diffusion algorithm, to increase the number of gray levels. A dithering algorithm using a multi-threshold level that changes from frame to frame is proposed. Improvement in tone reproduction has been effectively achieved in the proposed method.

**55.3: Study on Address Discharge Characteristics Using  $V_t$  Closed-Curve Analysis in ACPDPs (4:20)**

*B-G. Cho, H-S. Tae*  
*Kyungpook National University, Daegu, Korea*

The dependence of address discharge time lag and luminance on the driving waveform was investigated using the  $V_t$  closed-curve analysis. A waveform with decreased time lag and low background luminance is proposed. The scan low voltages are changed to the same voltage difference between the X and Y electrodes during an address period.

**55.4: Influence of He Content on Reset and Address Discharge Characteristics under Variable Panel Temperature in ACPDPs (4:40)**

*S-K. Jang, H-S. Tae  
Kyungpook National University, Daegu, Korea*

*E-Y. Jung, K-J. Suh, J-C. Ahn, E-G. Heo, B-H. Lee  
Samsung SDI Co., Ltd., Chungcheongnam-do, Korea*

The effects of He content in He-Ne-Xe (11%) on the reset and address discharges were examined under variable panel temperatures ranging from  $-5$  to  $+65^{\circ}\text{C}$ . The  $V_{t\_closed}$  curves and IR emission intensities were measured. As the panel temperature increased, the higher the He content could facilitate the reset and address discharges.

**AUTHOR INTERVIEWS**

**(5:00–6:00)**