

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.
Petitioner

v.

SOLAS OLED LTD.
Patent Owner

Case No. IPR2020-01546
U.S. Patent No. 7,573,068

**PETITION FOR *INTER PARTES* REVIEW
OF U.S. PATENT NO. 7,573,068**

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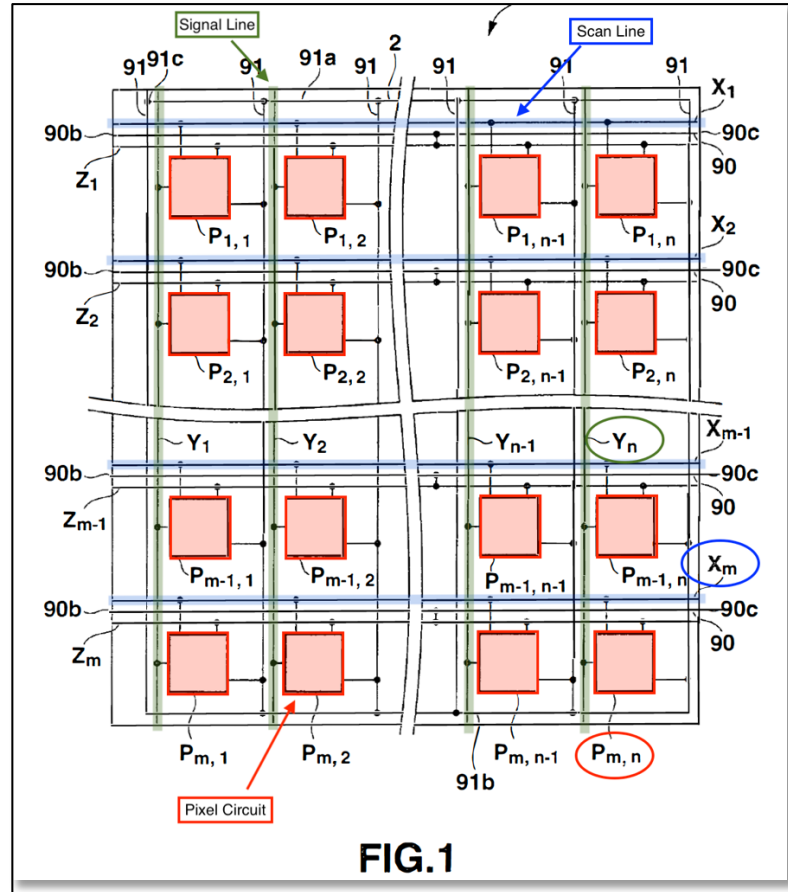
I. INTRODUCTION

Petitioner Apple Inc. (“Petitioner”) requests an *Inter Partes* Review (“IPR”) of claims 1, 5, 6, 8-13, and 17 (the “Challenged Claims”) of U.S. Patent No. 7,573,068 (“the ’068 Patent”).

III. SUMMARY OF THE ’068 PATENT

A. The ’068 Patent’s Alleged Invention

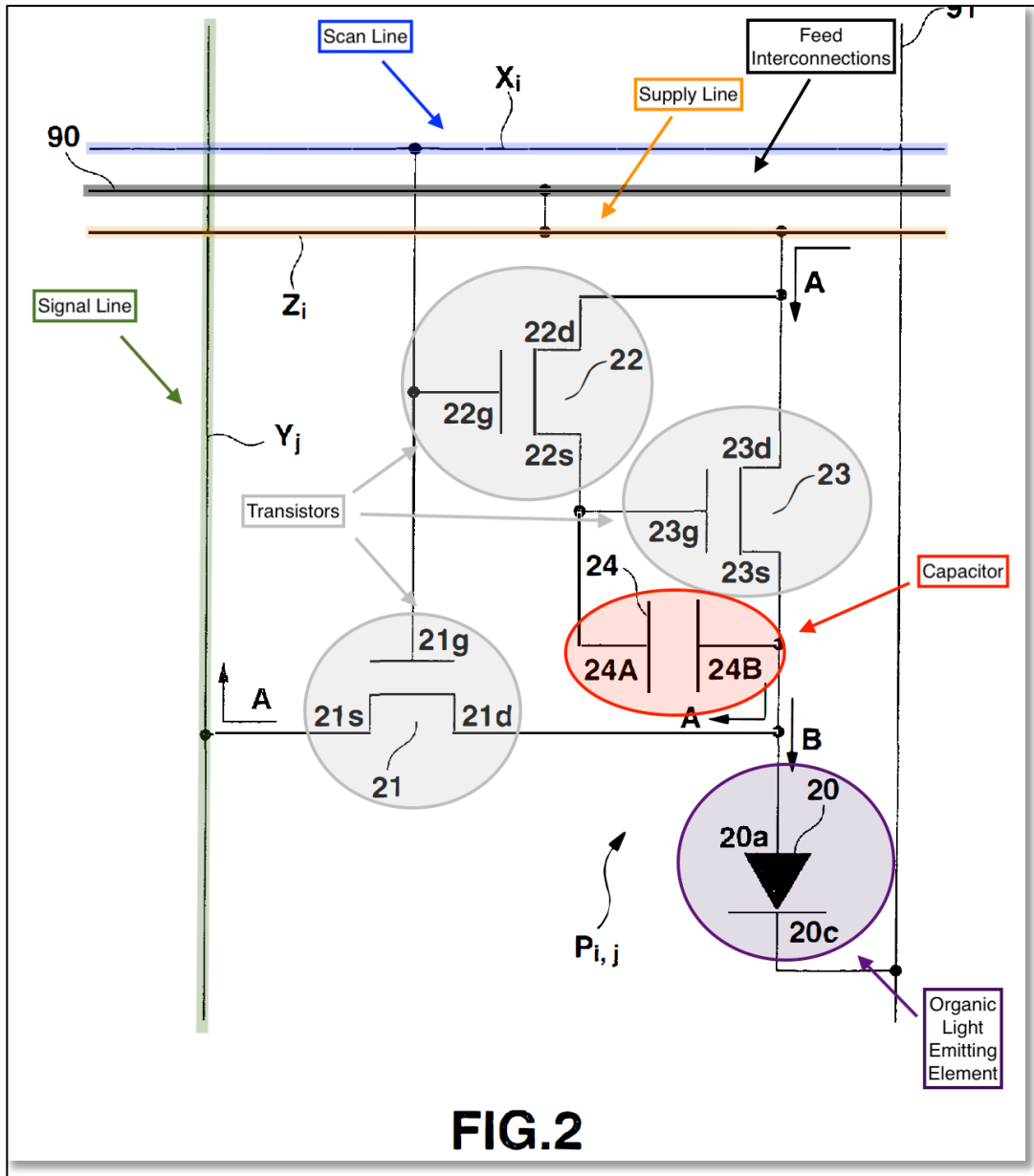
The ’068 Patent generally describes a specific circuit arrangement and manufacturing method for organic EL display panels. *’068 Patent* (Ex. 1001), Abstract, 1:16-20. The subject display panel is comprised of pixel circuits, each of which is located at the intersection of perpendicular signal and scan lines. *Id* at 6:1-2, 6:50-51. Figure 1 below illustrates the display panel array, comprising a plurality of signal lines Y_n (green) crossing a plurality of scan lines X_m (blue) with a pixel circuit $P_{m,n}$ (red) at each intersection:



Id. at Fig. 1 (annotated).

Circuit Layout

Each pixel circuit is comprised of three transistors, a capacitor, and an organic light-emitting element. *Id.* at 6:63-65. Figure 2 below illustrates the general arrangement of the '068 Patent's pixel circuit:



Id. at Figure 2 (annotated). The circuit layout is designed to optimize current delivery to each of the organic light-emitting elements across the display in accordance with the driving method described below.

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