



US 20230231094A1

(19) **United States**(12) **Patent Application Publication****VAN EESSEN et al.**(10) **Pub. No.: US 2023/0231094 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **SYSTEM AND METHOD FOR DISPLAY PANEL****Publication Classification**(71) Applicant: **BARCO N.V.**, Kortrijk (BE)(72) Inventors: **Wim VAN EESSEN**, Kruishoutem (BE); **Patrick WILLEM**, OOSTENDE (BE); **Bart VAN DEN BOSSCHE**, Marke (BE); **Peter GERETS**, Roeselare (BE)(51) **Int. Cl.****H01L 33/62** (2006.01)**H01L 25/075** (2006.01)**G09F 9/302** (2006.01)**G09F 9/33** (2006.01)(52) **U.S. Cl.**CPC **H01L 33/62** (2013.01); **H01L 25/0753**(2013.01); **G09F 9/3026** (2013.01); **G09F****9/33** (2013.01); **H01L 2933/0066** (2013.01)(73) Assignee: **BARCO N.V.**, Kortrijk (BE)(21) Appl. No.: **18/002,226**(22) PCT Filed: **Jun. 17, 2021**(86) PCT No.: **PCT/EP2021/066509**

§ 371 (c)(1),

(2) Date: **Dec. 16, 2022****ABSTRACT**

A display panel (65) and a method for manufacturing a display panel (65) that includes a front side and a back side, the display panel (65) including a substrate having a plurality of electrical components provided on a front side of the substrate and integrated circuits connected to the plurality of electrical components, the integrated circuits being embedded in the substrate. A plurality of edge contacts (54, 62) is also provided along edges of the substrate, where the plurality of edge contacts (54, 62) is electrically connected with the integrated circuits. An electrically conductive layer (51, 61) covers at least a part of the front side of the substrate and surrounds the plurality of electrical components, where the electrically conductive layer (51, 61) does not physically contact the embedded integrated circuits and provides EMI shielding to different components of the display panel (65).

Related U.S. Application Data

(63) Continuation of application No. 16/904,649, filed on Jun. 18, 2020, now Pat. No. 11,631,703.

