UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TIANMA MICROELECTRONICS CO. LTD., Petitioner,

V.

JAPAN DISPLAY INC. AND PANASONIC LIQUID CRYSTAL DISPLAY CO., LTD., Patent Owner

Case IPR No: IPR2021-01028

Patent No. 9,793,299

SUPPLEMENTAL DECLARATION OF THOMAS L. CREDELLE UNDER 37 C.F.R. § 1.68



I. INTRODUCTION

1. I, Thomas L. Credelle, submit this supplemental declaration in support of the preliminary response submitted by Japan Display Inc. and Panasonic Liquid Crystal Display Co., Ltd. (together, "Patent Owner") in connection with the petition for *Inter Partes* Review of U.S. Patent No. 9,793,299 ("the '299 patent") filed by Tianma Microelectronics Co. Ltd. ("Petitioner").

II. QUALIFICATIONS AND PROFESSIONAL EXPERIENCE

2. My qualifications and professional experience were expressed in my first declaration.

III. LEVEL OF ORDINARY SKILL IN THE ART

3. The requisite level of ordinary skill in the art was expressed in my first declaration.

IV. EXHIBIT 2009

- 4. I understand that Tianma has objected in Paper 17 to Exhibit 2009, which is titled "Part 2: Fundamentals of Touch Technologies other than Projective Capacitance."
- 5. Exhibit 2009 as originally filed is a true and correct copy of the 2014 Society for Information Display (SID) Week presentation "Part 2: Fundamentals of Touch Technologies other than Projective Capacitance." Part 2, which begins on page 197, states that it was updated in October 2013. SID's Display Week is a well-



known conference for professionals in the display field and the contents of Exhibit 2009 are consistent with the type of information that would be presented at SID Display Week.

- 6. Exhibit 2017 is a true and copy of a screen capture I made on January 13, 2022 of the 2014 archive from the Display Week website showing that Geoff Walker provided a presentation on touch technology on June 1, 2014. The abstract of the Seminar Presentation is publicly available at http://www.displayweek.org/2014/Program/Sunday-Short-Courses.
- 7. I provided Exhibit 2009 to JDI's counsel. I downloaded the complete tutorial, which includes Part 2, from the walkermobile.com website and the document was saved in my computer files. In my opinion, Exhibit 2009 provides reliable information regarding touch screen technology and is the type of resource that experts in the field would rely on.
- 8. The document is available publicly at http://www.walkermobile.com/Touch_Technologies_Tutorial_Latest_Version.pdf.
- 9. I cited to Exhibit 2009 in my declaration. *See* Ex. 2010, ¶41. Exhibit 2009 is relevant because it explains the difference between capacitive and resistive touch panels, which relates to my analysis of the *Maekawa* and *Takahata* references in my declaration and in the Patent Owner's Preliminary Response. Specifically, *Maekawa* and *Takahata* are not from the same field of endeavor because *Maekawa*



does not mention a touch screen and *Takahata* discloses a resistive touch screen. *Id.*Further, Exhibit 2009 is used to explain the thermal warpage issues associated with an air gap unique to resistive touch screens, such as the touch screen described in the *Takahata* reference. *Id.* at ¶¶41-42.

V. EXHIBIT 2010

- 10. Exhibit 2010 is my declaration, "Declaration of Thomas L. Credelle Under 36 C.F.R. § 1.68."
- 11. I understand that Petitioner has objected to paragraph 41 of Exhibit 2010.
- 12. The statements made in paragraphs 5-9 in reference to Exhibit 2009 apply to Exhibit 2010 at paragraph 41.

VI. CONCLUSION

13. This declaration and my opinions herein are made to the best of my knowledge and understanding, and based on the material available to me, at the time of signing this declaration. I declare that all statements made herein on my own knowledge are true and that all statements made on information and belief are believed to be true, and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001.



Dated: January 13, 2022

Respectfully submitted,

Thomas L. Credelle

