UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD TCL CORPORATION; TCL COMMUNICATION TECHNOLOGY HOLDINGS, LTD.; TCT MOBILE LIMITED; TCT MOBILE INC.; AND TCT MOBILE (US) INC. Petitioners, v. TELEFONAKTIEBOLAGET LM ERICSSON Patent Owner. —————

Cases IPR2015-01674, IPR2015-01676, IPR2015-01761, IPR2015-01806

U.S. Patent No. RE43,931

DECLARATION OF JEAN RENARD WARD

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Pursuant to 28 U.S.C. § 1746, I, Jean Renard Ward, hereby declare:

- 1. My name is Jean Renard Ward. I am over eighteen years of age, of sound mind, and in all ways qualified and competent to make this declaration. I have personal knowledge of the facts contained in this declaration and they are true and correct.
- 2. I am an independent developer and consultant in the areas of applications of public-key cryptography and computer security, in addition to pen/touch computing.
- 3. Ex. 2073 is a true and correct electronic copy of "Power Management in Mobile Devices" by Findlay Shearer, published in 2008.
- 4. Ex. 2074 is a true and correct electronic copy of "Smartphone Energy Consumption" by Sasu Tarkoma, Matti Siekkinen, Eemil Lagerspetz, and Yu Xiao, published in 2014.
- 5. I hereby declare that all statements made herein of 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

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or imprisonment, or both, under Section 1001 of Title 18 of the U.S. Code and that such willful false statements may jeopardize the results of these proceedings.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Date: 12 July 2016

Jean Renard Ward

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