UNITED STATES PATENT AND TRADEMARK OFFICE

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**BEFORE THE PATENT TRIAL AND APPEAL BOARD**

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SAMSUNG ELECTRONICS CO., LTD.,
Petitioner

v.

TELEFONAKTIEBOLAGET LM ERICSSON,
Patent Owner

**U.S. PATENT NO. 10,193,600**

Case IPR2021-TBD

# DECLARATION OF DR. APOSTOLOS K. KAKAES, PH.D. IN SUPPORT OF PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 10,193,600

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## LIST OF EXHIBITS

| Exhibit No. | Description |
|---|---|
| 1001 | U.S. Patent No. 10,193,600 (the "'600 Patent") |
| 1002 | Certified File History of U.S. Patent No. 10,193,600 |
| 1003 | Declaration of Dr. Apostolos K. Kakaes for *Inter Partes* Review of U.S. Patent No. 10,193,600 |
| 1004 | *Curriculum Vitae* of Dr. Apostolos K. Kakaes |
| 1005 | U.S. Patent Application Publication No. 2014/0016549 ("Novlan") |
| 1006 | 3GPP TS 36.213, v12.3.0 ("36.213") |
| 1007 | 3GPP TS 36.213, v10.1.0 |
| 1008 | U.S. Patent No. 8,891,676 |
| 1009 | Declaration of Friedhelm Rodermund |
| 1010 | U.S. Provisional Patent Application No. 62/103,101 ("the '600 Patent Provisional") |
| 1011 | U.S. Patent Application Publication No. 2013/0163687 ("Jing ") |
| 1012 | U.S. Provisional Patent Application No. 61/670,936 (the "Novlan Provisional") |
| 1013 | Dahlman *et al.*, 4G – LTE / LTE-Advanced for Mobile Broadband (Academic Press 2011) |
| 1014 | Stipulation by Petitioner |
| 1015 | U.S. Patent Application No. 2008/0051091 |
| 1016 | Sesia, *et al.*, LTE - The UMTS Long Term Evolution From Theory to Practice (Wiley 2d. ed. 2011) |



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