

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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APPLE INC.

Petitioner

v.

TELEFONAKTIEBOLAGET LM ERICSSON

Patent Owner

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*Inter Partes* Review Case No. IPR2022-00457

U.S. Patent No. 9,509,440

**DECLARATION OF FRIEDHELM RODERMUND IN SUPPORT OF  
PETITION FOR INTER PARTES REVIEW OF  
U.S. PATENT NO. 9,509,440**

TABLE OF CONTENTS

<b><i>I. INTRODUCTION AND ENGAGEMENT</i></b> .....	<b>2</b>
<b><i>II. BACKGROUND AND QUALIFICATIONS</i></b> .....	<b>3</b>
<b><i>III. SUMMARY OF MY OPINIONS</i></b> .....	<b>8</b>
<b><i>IV. PUBLICATION OF 3GPP SPECIFICATIONS AND RELATED DOCUMENTS</i></b> .....	<b>8</b>
<b>A. General Practices</b> .....	<b>8</b>
<b>B. Specific Documents</b> .....	<b>19</b>
<b>1. TS 36.213 v10.3.0</b> .....	<b>19</b>
<b><i>V. AVAILABILITY FOR CROSS-EXAMINATION</i></b> .....	<b>28</b>
<b>A. Right to Supplement</b> .....	<b>28</b>
<b>B. Signature</b> .....	<b>28</b>

I, Friedhelm Rodermund, declare as follows:

**I. INTRODUCTION AND ENGAGEMENT**

1. I have been retained in this matter by Apple (“Petitioner” or “Apple”) to provide testimony regarding 3GPP’s standard business practices for record keeping and publishing technical specifications, change request proposals, reports, and other documents developed during the course of standards activities carried out by the 3rd Generation Partnership Project (“3GPP”) and the European Telecommunications Standards Institute (“ETSI”).

2. I have been asked to provide my opinions regarding the authenticity and dates of public accessibility of the following 3GPP document:

- Version 10.3.0 of technical specification 3GPP TS 36.213  
(“Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA); Physical layer procedures (Release 10)”) (hereinafter “TS 36.213 v10.3.0”, Ex. 1009)

3. As an ETSI Project Manager and Secretary, from June 1998 to December 2004, I have personal knowledge of 3GPP’s standard business and records keeping practices. I continued following 3GPP’s work ever since. Thus, based on my experience, personal knowledge, and review of 3GPP’s business

records, I am able to testify regarding the authenticity of certain documents published by 3GPP and the timing of their publication.

4. I am being compensated for my time spent on this matter at my usual rate of €450 per hour. My fee is not contingent on the outcome of this or any matter, or on the content of any of the testimony I give in this declaration. I have no financial interest in Petitioner.

5. I am also knowledgeable about document management practices and the usage of email reflectors in TSG RAN WG1. This is due to the fact that all 3GPP working groups used the same document repository on <http://ftp.3gpp.org> and all working groups use the same email exploder tool. Thus, I'm able to testify regarding the availability and authenticity of any 3GPP documents and any 3GPP exploder emails.

6. I have been informed that Ericsson (hereinafter referred to as "Patent Owner") alleges ownership and is the current assignee of U.S. Patent No. 9,509,440 ("the '440 Patent") (Ex. 1001). I have no financial interest in the Patent Owner or the '440 patent.

## **II. BACKGROUND AND QUALIFICATIONS**

7. I have more than 20 years of experience working with standards development organizations including the Third Generation Partnership Project ("3GPP"), the European Telecommunications Standards Institute ("ETSI"), and the

Open Mobile Alliance (“OMA”). I have particular experience with the development of standards related to cellular telecommunications, including the standards for the Universal Mobile Telecommunications System (“UMTS”), Long Term Evolution (“LTE”), and 5G, which are all standards developed by the 3GPP.

8. I attended the University of Technology Aachen in Aachen, Germany, where I performed graduate studies in Electrical Engineering with a focus on telecommunications technologies (“Dipl.-Ing. TH” degree). I also attended the University of Technology Trondheim in Trondheim, Norway, and completed my Diploma thesis, “Design of a dual processor computer for digital signal processing in power electronics,” in 1993.

9. From December 1993 to June 1998, I worked at Mannesmann Mobilfunk as a System Engineer and Project Manager in Quality Assurance and Technical Standards. One of my responsibilities was to ensure by managing and performing related test activities that cellular network equipment was compatible with the Global System for Mobile Communications (“GSM”) standard developed by ETSI. During that time, I also started working as a standards delegate. I attended my first ETSI meeting in 1996 (although I was already following ETSI developments from 1992 during my studies).

10. From June 1998 to December 2004, I worked at ETSI as a project manager for various ETSI Special Mobile Group (“SMG”) and 3GPP working

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