

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD.,
Petitioner

v.

TELEFONAKTIEBOLAGET LM ERICSSON
Patent Owner

U.S. PATENT NO. 10,512,027

Case IPR2021-TBD

**DECLARATION OF JONATHAN WELLS UNDER 37 C.F.R. § 1.68
IN SUPPORT OF PETITION FOR *INTER PARTES* REVIEW OF
U.S. PATENT NO. 10,512,027**

CONTENTS

I. INTRODUCTION1

II. QUALIFICATIONS2

III. UNDERSTANDING OF PATENT LAW7

IV. SUMMARY OF MY OPINIONS9

V. OVERVIEW OF THE TECHNOLOGY.....10

 A. Cellular Networks.....10

 B. Long-Term Evolution (LTE) and New Radio (NR)11

 C. System Information (SI) and System Information Blocks (SIBs)12

 D. Using Preambles to Request System Information.....14

VI. OVERVIEW OF THE '027 PATENT15

VII. PERSON OF ORDINARY SKILL IN THE ART17

VIII. OVERVIEW OF THE PRIMARY REFERENCES18

 A. U.S. Patent No. 10,455,621 to Agiwal et al. (Ex. 1002).....18

 1. Agiwal’s Provisional Applications21

 2. The Agiwal Provisional Applications Support Claim 1 of Agiwal.....24

 B. U.S. Patent Application Publication No. 2019/0174554 to Deenoo et al. (Ex. 1003).....28

 1. Deenoo’s Provisional Applications31

 2. The Deenoo Provisional Applications Support Claim 1 of Deenoo34

 C. U.S. Patent Application Publication No. 2016/0234736 to Kubota et al. (Ex. 1004)37

IX. ANALYSIS.....39

Declaration of Dr. Wells for *Inter Partes* Review of U.S. Patent No. 10,512,027

A.	Ground I: Claims 1-8, 10-18, and 20-21 are obvious in view of Agiwal	39
1.	Claim 1	40
2.	Claim 2	50
3.	Claim 3	52
4.	Claim 4	54
5.	Claim 5	54
6.	Claim 6	58
7.	Claim 7	58
8.	Claim 8	60
9.	Claim 10	63
10.	Claim 11	64
11.	Claim 12	66
12.	Claim 13	67
13.	Claim 14	67
14.	Claim 15	68
15.	Claim 16	68
16.	Claim 17	68
17.	Claim 18	69
18.	Claim 20	69
19.	Claim 21	69
B.	Ground II: Claims 1-8, 10-18, and 20-21 are obvious in view of Deenoo	71
1.	Claim 1	71
2.	Claim 2	79
3.	Claim 3	81
4.	Claim 4	82
5.	Claim 5	82
6.	Claim 6	85
7.	Claim 7	85
8.	Claim 8	86
9.	Claim 10	88
10.	Claim 11	88
11.	Claim 12	92
12.	Claim 13	93
13.	Claim 14	93
14.	Claim 15	93
15.	Claim 16	94

Declaration of Dr. Wells for *Inter Partes* Review of U.S. Patent No. 10,512,027

16.	Claim 17.....	94
17.	Claim 18.....	94
18.	Claim 20.....	95
19.	Claim 21.....	95
C.	Ground III: Claims 3, 4, 11-18, and 20 are obvious in view of Agiwal and Kubota.....	97
1.	Claim 3.....	97
2.	Claim 4.....	101
3.	Claim 11.....	101
4.	Claim 12.....	105
5.	Claim 13.....	105
6.	Claim 14.....	105
7.	Claim 15.....	106
8.	Claim 16.....	106
9.	Claim 17.....	107
10.	Claim 18.....	107
11.	Claim 20.....	107
D.	Ground IV: Claims 3, 4, 13, and 14 are obvious in view of Deenoo and Kubota.....	108
1.	Claim 3.....	108
2.	Claim 4.....	112
3.	Claim 13.....	113
4.	Claim 14.....	113
X.	SECONDARY CONSIDERATIONS.....	114
XI.	CONCLUSION.....	115

I, Jonathan Wells, do hereby declare as follows:

I. INTRODUCTION

1. I have been retained as an expert witness by Petitioner Samsung Electronics Co., Ltd. (“Samsung” or “Petitioner”) in connection with the above-captioned Petition for *Inter Partes* Review (“IPR”) of U.S. Patent No. 10,512,027 (“the ’027 patent”) (Ex. 1001).

2. I have been asked to prepare this Declaration to provide my opinions regarding whether or not claims 1-8, 10-18, and 20-21 of the ’027 patent are valid in view of the prior art cited in the Petition. I refer to claims 1-8, 10-18, and 20-21 of the ’027 patent as the “Challenged Claims.”

3. In preparing my Declaration, I reviewed the ’027 patent, including its file history, prior art references, technical references, and other publications from the time of the alleged invention, which I discuss herein, including 3GPP meeting notes R2-166120 from October 10-14, 2016; LTE for UMTS, Evolution to LTE-Advanced, Harri Holma and Antti Toskala (2d Ed., 2011) (“Holma”); and LTE - The UMTS Long Term Evolution: From Theory to Practice, Stefania Sesia Baker and Issam Toufik (2nd ed., 2011) (“Sesia”).

4. In forming the opinions expressed in my Declaration, I relied upon my education and experience, and I considered the viewpoint of a person having

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.