

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ERICSSON INC. AND
TELEFONAKTIEBOLAGET LM ERICSSON
Petitioners

v.

INTELLECTUAL VENTURES II LLC
Patent Owner

Case No. Unassigned
Patent 8,897,828

**PETITION FOR *INTER PARTES* REVIEW OF CLAIMS 1-2, 5-6, 8-9, 12-13,
15-16, 19-20, 22-23, 26-27, 29-30, 33-34, 36-37, 40-41 OF U.S. PATENT NO.
8,897,828**

**DECLARATION OF DR. WAYNE STARK
UNDER 37 C.F.R. § 1.68**

TABLE OF CONTENTS

I. BACKGROUND AND QUALIFICATIONS	4
II. LEGAL UNDERSTANDING	6
III. MATERIALS CONSIDERED.....	10
IV. LEVEL OF ORDINARY SKILL IN THE ART.....	12
V. OVERVIEW OF THE '828 PATENT	13
A. <i>Subject Matter of the '828 Patent.....</i>	<i>13</i>
B. <i>Prosecution History of the '828 Patent.....</i>	<i>19</i>
C. <i>Priority Date of the '828 Patent.....</i>	<i>22</i>
VI. SUMMARY OF PRIOR ART	23
A. <i>Combined Closed-Loop and Open-Loop Power Control Schemes (Zeira) ..</i>	<i>23</i>
B. <i>Switching Between Power Control Modes at the Network Level (Cheng)....</i>	<i>25</i>
C. <i>Power Control Commands and Allocations on the Same Channel (Chen) ..</i>	<i>26</i>
D. <i>Multilevel TPC commands (Tong).....</i>	<i>27</i>
E. <i>Setting Transmit Power Based on Selected Transport Format (Shiu).....</i>	<i>27</i>
VII. CLAIM CONSTRUCTION.....	28
A. <i>“accumulation of transmit power control (TPC) commands”.....</i>	<i>28</i>
B. <i>“multilevel TPC command”</i>	<i>31</i>
VIII. THE CHALLENGED CLAIMS ARE UNPATENTABLE.....	32
A. <i>Ground 1: The Combination of Zeira, Chen, and Cheng Renders Claims 15, 19, 22, 26, 29, 33, 36, and 40, as well as Claims 1, 5, 8, and 12, Obvious.</i>	<i>33</i>
1. <i>A POSITA would have been motivated to combine Zeira, Chen, and Cheng with a reasonable expectation of success.</i>	<i>33</i>
2. <i>Claim 15</i>	<i>42</i>
3. <i>Claim 19</i>	<i>73</i>
4. <i>Claim 22</i>	<i>74</i>
5. <i>Claim 26</i>	<i>80</i>
6. <i>Claim 29</i>	<i>80</i>
7. <i>Claim 33</i>	<i>82</i>

8. Claim 36	83
9. Claim 40	86
10. Claim 1	87
11. Claim 5	88
12. Claim 8	88
13. Claim 12	89
<i>B. Ground 2: The Combination of Zeira, Chen, Cheng, and Tong Renders</i>	
<i>Obvious Claims 16, 23, 30, and 37, as well as Claims 2 and 9.</i>	89
1. Claim 16	89
2. Claim 23	93
3. Claim 30	93
4. Claim 37	93
5. Claim 2	93
6. Claim 9	94
<i>C. Ground 3: The Combination of Zeira, Chen, Cheng, and Shiu Renders</i>	
<i>Obvious Claims 20, 27, 34, and 41, as well as Claims 6 and 13.</i>	94
1. Claim 20	94
2. Claim 27	99
3. Claim 34	99
4. Claim 41	100
5. Claim 6	100
6. Claim 13	100
IX. CONCLUSION	100

DECLARATION OF DR. WAYNE STARK, PH.D.

I, Dr. Wayne Stark, declare as follows:

1. I make this declaration based on my own personal knowledge and, if called upon to testify, would testify competently to the matters contained herein.

2. I have been asked to provide technical assistance in the *inter partes* review of U.S. Patent No. 8,897,828 (“the ’828 Patent”).

3. This declaration is a statement of my opinions on issues related to the unpatentability of claims 1-2, 5-6, 8-9, 12-13, 15-16, 19-20, 22-23, 26-27, 29-30, 33-34, 36-37, and 40-41 of the ’828 Patent.

I. BACKGROUND AND QUALIFICATIONS

4. In forming my opinions, I have relied upon my knowledge, training, and experience in the relevant art. While my qualifications are stated more fully in my curriculum vitae (Ex. 1002), here I provide a summary of my qualifications.

5. I received a Ph.D. in electrical engineering from the University of Illinois in 1982. I also received Bachelor and Master’s Degrees in electrical engineering from the University of Illinois in 1978 and 1979, respectively. My Curriculum Vitae is attached as Ex. 1002.

6. I have over 35 years of experience as a researcher and a practitioner in electrical engineering, particularly in the field of wireless communications, and

more specifically in the technical areas of frequency hopping and error correction coding.

7. I currently am a Professor of Electrical Engineering and Computer Science at the University of Michigan, Ann Arbor campus, and have held that position since September 1996. Prior to becoming a full Professor, I had been employed continuously either as an Associate Professor or an Assistant Professor (with the exception of sabbaticals working for various corporations, as noted in my attached CV), at the University of Michigan, Ann Arbor campus since September 1982.

8. I am a named inventor on several U.S. Patents. I have also authored over two hundred (200) technical articles and conference publications, and have contributed to several books. Most of those articles, publications, and contributions, relate to wireless communications in general, and frequency hopping and error correction coding in particular.

9. I have received several honors for the research I have done. I am an IEEE Fellow (for contributions to the theory and practice of coding and modulation in spread spectrum systems). I received the National Science Foundation Presidential Young Investigator Award in 1985. I received the IEEE Milcom Board 2002 Technical Achievement Award. I received the Journal of Communications and Networks Best Paper Award in 2010.

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.