# Exhibit 12

BEFORE T	THE PATENT TRIAL AND APPEAL BOARD
	le Communication Co. Ltd., TCT Mobile (US) Inc. Mobile Communication (HK) Co., Ltd. Petitioners
	v.
	WI-LAN INC., Patent Owner
INTER PARTI	ES REVIEW OF U.S. PATENT NO. 9,854,577 B2 Case IPR No.: IPR2020-00304



### TABLE OF CONTENTS

(continued)

			1	Page		
I.	Introduction.					
II.	Background and Qualifications					
III.	Priori	Priority Date and One of Ordinary Skill				
IV.	Mate	Materials Relied Upon				
V.	Legal Standards					
	A.	A. Obviousness				
VI.	BAC	CKGROUND OF THE ART				
VII.	/II. Analysis of the '577 Patent					
	A.	Over	view of the '577 Patent	17		
	B.	Clain	n Construction of the '577 Patent Claims	17		
		1.	"receive unit" (claims 1 and 9)	18		
		2.	"transmit unit" (claim 4)	20		
		3.	"control data via control channels" (claims 1 and 12)	23		
VIII.	OVE	VERVIEW OF THE PRIOR ART REFERENCES24				
IX.	PRIO	RIORITY OF GOROKHOV24				
X.	SPECIFIC GROUNDS OF CHALLENGE					
	A.		nd 1A: Claims 1, 3-6, 8-12, 14-17, and 19-22 are rendered ous by Gorokhov	27		
	В.		nd 1B: Claims 2 and 13 are rendered obvious by Gorokhov ung	55		
	C.	Gound 1C: Claims 7 and 18 are rendered obvious by Gorokhov and Zhao				
	D.	Gound 1D: Claims 10 and 21 are rendered obvious by Gorokhov and Walton				
	E.		nd 2A: Claims 1, 3-5, 11-12, 14-16, and 22 are rendered ous by Ryu and Yamaura	66		
		(a)	Claim 1 is rendered obvious by Ryu and Yamaura	68		
		(b)	Claim 3 is rendered obvious by Ryu and Yamaura			
		(c)	Claim 4 is rendered obvious by Ryu and Yamaura			
		100 SEC				

### TABLE OF CONTENTS

(continued)

Page

	(d)	Claim 5 is rendered obvious by Ryu and Yamaura	85
	(e)	Claim 11 is rendered obvious by Ryu and Yamaura	86
	(f)	Claim 12 is rendered obvious by Ryu and Yamaura	87
	(g)	Claim 14 is rendered obvious by Ryu and Yamaura	88
	(h)	Claim 15 is rendered obvious by Ryu and Yamaura	89
	(i)	Claim 16 is rendered obvious by Ryu and Yamaura	89
	(j)	Claim 22 is rendered obvious by Ryu and Yamaura	89
F.			89
G.			92
	(a)	Claim 7 is rendered obvious by Ryu, Yamaura, and Zhao	95
	(b)	Claim 18 is rendered obvious by Ryu, Yamaura, and Zhao	96
Н.			97
	(a)	Claim 10 is rendered obvious by Ryu, Yamaura, and Walton	98
	(b)	Claim 21 is rendered obvious by Ryu, Yamaura, and	
Secon	Secondary Considerations99		
Conclusion			
	G. H.	(e) (f) (g) (h) (i) (j) F. Gour Yam (a) (b) H. Gour Yam (a) (b) Secondary	(e) Claim 11 is rendered obvious by Ryu and Yamaura



Case 2:22-md-03034-TGB ECF No. 268-14, PageID.29431 Filed 07/18/24 Page 5 of 9

Petition for Inter Partes Review of U.S. Patent 9,854,577 B2 PTAB Case No. IPR2020-00304 EX1003: Declaration of Dr. Titus Lo

#### I. INTRODUCTION

5

10

- 1. My name is Titus Lo, and I have been retained by counsel for Petitioner TCT Mobile, Inc., TCT Mobile US Holdings Inc., TCL Communication Inc. ("TCL" or "Petitioner" or "Petitioners") as an expert witness to provide my opinion regarding certain prior art references and U.S. Patent No. 9,854,577 (the "'577 patent").
- 2. I have been asked to consider the validity of claims 1-22 of the '577 patent in view of the understanding of a person of ordinary skill in the art ("POSITA") as it relates to the '577 patent. I have personal knowledge of the facts and opinions set forth in this declaration, and believe them to be true. If called upon to do so, I would testify competently thereto.
- 3. I am being compensated for my time at my standard consulting rate. I am also being reimbursed for expenses that I incur during the course of this work. My compensation is not contingent upon the results of my study, the substance of my opinions, or the outcome of any proceeding involving the challenged claims. I have no financial interest in the outcome of this matter or on the pending litigation between Petitioner and Patent Owner.

# DOCKET

# 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.

