UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NOKIA OF AMERICA CORPORATION Petitioner

v.

INTELLECTUAL VENTURES II LLC Patent Owner

DECLARATION OF PAUL S. MIN, PH.D

Case No. IPR2018-0XXXX

A L A R M Find authenticated court documents without watermarks at <u>docketalarm.com</u>.

DOCKET

TABLE OF CONTENTS

Page 1

I.	Introduction & Summary of Opinions1						
II.	Background/Qualifications						
III.	Documents and Materials Considered						
IV.	Legal Principles7						
V.	Chall	lenged	Claims of '828 Patent13				
VI.	Person of Ordinary Skill in the Art						
VII.	Technology Background21						
VIII.	Prior	Art R	eferences				
IX.	Claim Construction						
X.	Invalidity Analysis of the '828 Patent40						
	A. Independent claim 1 is obvious						
		1.	A method performed by user equipment (UE), the method comprising:				
		2.	receiving, by the UE, an indication of whether accumulation of transmit power control (TPC) commands is enabled;				
		3.	determining, by the UE, a path loss of a downlink channel;				
		4.	receiving, on a single physical channel by the UE if accumulation is enabled, an allocation of a scheduled uplink resource and a TPC command, wherein the TPC command is accumulated with other received TPC commands;				
		5.	calculating, by the UE if accumulation is enabled, transmit power in association with an uplink communication based on both the path loss and the accumulated TPC commands; and				
		6.	receiving, on the single physical channel by the UE if accumulation is not enabled, an allocation of a scheduled uplink resource to transmit data at a power level calculated by the UE based on the path loss				

В.	Dependent claim 5 is obvious			
	1.	The method according to claim 1,	50	
	2.	wherein the determining the path loss further includes computing a difference between a signaled transmit power and a measured received power of the downlink channel.	50	
C.	Depe	endent claim 6 is obvious.		
	1.	The method according to claim 1,	51	
	2.	wherein the calculated transmit power is based on a selected transport format	51	
D.	Independent claim 8 is obvious			
	1.	A user equipment (UE) characterized in that:	52	
	2.	circuitry is configured to receive, by the UE, an indication of whether accumulation of transmit power control (TPC) commands is enabled;	52	
	3.	circuitry is configured to determine a path loss of a downlink channel;	52	
	4.	the circuitry is further configured to receive, on a single physical channel if accumulation is enabled, an allocation of a scheduled uplink resource and a TPC command, wherein the TPC command is accumulated with other received TPC commands;	52	
	5.	circuitry is configured to calculate, by the UE if accumulation is enabled, transmit power in association with an uplink communication based on both the path loss and the accumulated TPC commands; and	52	
	6.	the circuitry is further configured to receive, on the single physical channel by the UE if accumulation is not enabled, an allocation of a scheduled uplink resource to transmit data at a power level calculated by the UE based on the path loss	53	
E.	Dependent claim 12 is obvious.			
	1.	The UE of claim 8,	53	

	2.	wherein the determination of the path loss further includes a computation of a difference between signaled transmit power and a measured received power of the downlink channel.	53	
F.	Dependent claim 13 is obvious.			
	1.	The UE of claim 8,	53	
	2.	wherein the calculated transmit power is based on a selected transport format	53	
G.	Independent claim 15 is obvious			
	1.	A method performed by a wireless network, the method comprising:	54	
	2.	sending, by the wireless network, an indication of whether accumulation of transmit power control (TPC) commands is enabled;	54	
	3.	determining, by a user equipment (UE), a path loss of a downlink channel;	54	
	4.	receiving, on a single physical channel by the UE if accumulation is enabled, an allocation of a scheduled uplink resource and a TPC command, wherein the TPC command is accumulated with other received TPC commands;	54	
	5.	calculating, by the UE if accumulation is enabled, transmit power in association with an uplink communication based on both the path loss and the accumulated TPC commands; and	54	
	6.	receiving, on the single physical channel by the UE if accumulation is not enabled, an allocation of a scheduled uplink resource to transmit data to the wireless network at a power level calculated by the UE based on the path loss	54	
Н.	Dependent claim 19 is obvious			
	1.	The method of claim 15,	55	
	2.	wherein the determining the path loss further includes computing a difference between a signaled transmit		

		power an a measured received power of the downlink channel.	55
I.	Depe	endent claim 20 is obvious	55
	1.	The method of claim 15,	55
	2.	wherein the calculated transmit power is based on a selected transport format	55
J.	Inde	pendent claim 22 is obvious	55
	1.	A wireless network characterized in that:	56
	2.	the wireless network is configured to send an indication of whether accumulation of transmit power control (TPC) commands is enabled;	56
	3.	a user equipment (UE) characterized in that:	56
	4.	circuitry is configured to determine, by the UE, a path loss of a downlink channel;	56
	5.	circuitry is configured to receive, on a single physical channel if accumulation is enabled, an allocation of a scheduled uplink resource and a TPC command, wherein the TPC command is accumulated with other received TPC commands;	56
	6.	circuitry is configured to calculate, by the UE if accumulation is enabled, transmit power in association with an uplink communication based on both the path loss and the accumulated TPC commands; and	56
	7.	the circuitry is further configured to receive, on the single physical channel by the UE if accumulation is not enabled, an allocation of a scheduled uplink resource to transmit data to the wireless network at a power level calculated by the UE based on the path loss	56
K.	Dependent claim 26 is obvious.		
	1.	The wireless network of claim 22,	57
	2.	wherein the determination of the path loss further includes a computation of a difference between a signaled transmit power and a measured received of the downlink channel.	57

DOCKET A L A R M



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.