## 

Petition for *Inter Partes* Review of U.S. Patent No. 9,651,533

Inter Partes Review No. IPR2019-00913

## **Table of Contents**

1.	Introduction1							
П.	Regulatory Information							
	<b>A.</b>	. Certification that Petitioner May Contest the '533 Patent (§ 42.104(a))						
	B.	Idei	ntification of Claims Being Challenged (§ 42.104(b))	4				
	<b>C.</b>	Fee for Inter Partes Review (§ 42.15(a))						
	D.	Service on Patent Owner (§ 42.105)						
III.	The '533 Patent and Background Technology5							
	<b>A.</b>							
	В.	Industry Trends Drove Development of Mobile Network- Connected Devices to Track Health Traits Before 20128						
IV.	The '533 Patent							
	<b>A.</b>	The '533 Patent Is Subject to AIA						
	В.	File History						
	C.	Person of Ordinary Skill in the Art						
V.	Claim Construction18							
	A.		am"					
	B.	"Plurality of lenses"						
	C.	"Pulse rate"						
VI.	Detailed Explanation Why the '533 Patent Claims Are Unpatentable 22							
	A.	Ground 1: Valencell-093 and Valencell-099 Render Obvious Claims 5, 7-10, 13, and 15-1723						
		1.	Overview of Valencell-093	23				
		2.	Overview of Valencell-099	26				
		3.	A Skilled Person Would Have Considered Valencell-09 Valencell-099					
		4.	Independent Claim 13	32				



a)	Preamble				
b)	"a wearable measurement device for measuring one or more physiological parameters"33				
	(1) "including a light source comprising a plurality of semiconductor sources that are light emitting diodes"				
	(2) "the light emitting diodes configured to generate an output optical beam with one or more optical wavelengths"				
	(3) "wherein at least a portion of the one or more optical wavelengths is a near-infrared wavelength between 700 nanometers and 2500 nanometers".35				
	(4) "the light source configured to increase signal-to-noise ratio by increasing a light intensity from at least one of the plurality of semiconductor sources"				
	(5) "and by increasing a pulse rate of at least one of the plurality of semiconductor sources;"37				
c)	"the wearable measurement device comprising a plurality of lenses configured to receive a portion of the output optical beam and to deliver an analysis output beam to a sample;"				
d)	"the wearable measurement device further comprising a receiver configured to receive and process at least a portion of the analysis output beam reflected or transmitted from the sample and to generate an output signal"				
e)	"wherein the wearable measurement device receiver is configured to be synchronized to pulses of the light source"				
f)	"a personal device comprising a wireless receiver, a wireless transmitter, a display, a microphone, a speaker, one or more buttons or knobs, a microprocessor and a touch screen,"				



		output signal is configured to be transmitted over a wireless transmission link;"			
	g)	"and a remote device configured to receive over the wireless transmission link an output status comprising the at least a portion of the processed output signal,"			
5.	Independent Claim 5				
	a)	Preamble55			
	b)	"a light source comprising a plurality of light emitting diodes"			
		(2) "and by increasing a pulse rate of at least one of the plurality of semiconductor sources"55			
	c)	"an apparatus comprising a plurality of lenses configured to receive a portion of the output optical beam and to deliver an analysis output beam to a sample"			
	d)	"a receiver configured to receive and process at least a portion of the analysis output beam reflected or transmitted from the sample and to generate an output signal,"			
	e)	'wherein the receiver is configured to be synchronized to pulses of the light source"			
	f)	"a personal device comprising a wireless receiver, a wireless transmitter, a display, a microphone, a speaker, one or more buttons or knobs, a microprocessor and a touch screen"			



Clair	n App	endix	•••••	•••••		77
VII.	Con	clusio	n	•••••		75
	D.	No S	Second	ary Co	onsiderations Exist	75
	<b>C.</b>	<b>Ground 3</b> : Valencell-093 and Valencell-099 in view of Mannheimer Render Obvious Claims 8-9 and 16-17				
		4.	Depe	endent	Claims 7-10, and 15-17	69
		3.	Inde	penden	t Claims 5 and 13	67
		2.			erson Would Have Modified The Sensor of 193 to Incorporate Elements Shown in Carlson	65
		1.			of Carlson	
	В.				ncell-093 and Valencell-099 in view of Carlson Claims 5, 7-10, 13 and 15-17	
			d)	Depe	endent Claim 10	63
			c)	Depe	endent Claims 9 and 17	62
			b)		endent Claims 8 and 16	
			a)	Depe	endent Claims 7 and 15	58
		6.		•	n of Dependent Claims to Valencell-093 and 199	58
			g)	trans	mote device configured to receive over the wire mission link an output status comprising the at letion of the processed output signal,"	east 57 ate
				(2)	wherein the personal device is configured to st and display the processed output signal" "and wherein at least a portion of the processed output signal is configured to be transmitted of wireless transmission link"	57 d ver a
				(1)	"the personal device configured to receive and process at least a portion of the output signal"	57



# 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.

