

Exhibit A

EXHIBIT A– P. R. 4-5(d) Chart by Patent

U.S. Patent No. 9,055,868				
Claim Language	Claim Term	Plaintiff's Construction	Defendants' Construction	The Court's Construction
7. A diagnostic system comprising: a light source comprising: one or more semiconductor diodes generating an input light beam ; and a lens system configured to receive at least a portion of the input light beam and to communicate at least the portion of the input light beam onto a part of a user's body comprising blood, wherein at least the portion of the input light beam is used in a measurement on a user; a software application capable of generating data based at least in part on the measurement on the user, wherein the data represents at least in part physiological information associated with the user; the software application capable of operating on a control system adapted to receive, store and process at least a portion of the physiological information, the control system having a touch-screen, circuitry for obtaining position information from a location sensor, and a wireless transceiver to transmit wireless data	"beam"	[AGREED]	[AGREED]	"photons or light transmitted to a particular location in space"

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over a wireless link, the wireless data comprising at least a part of the physiological information, wherein the control system is further capable of receiving voice input signals and manually entered input signals; and a host comprising: a digital file for receiving and storing at least a portion of the wireless data; control logic at the host to process at least the portion of the wireless data to generate a status of the user; a memory storage device for recording the status; and an output for communicating at least a portion of the status or associated information over a communication link to one or more display output devices, wherein the one or more display output devices are located remotely from the host.				
8. The diagnostic system of claim 7, wherein the light source comprises a plurality of semiconductor diodes that are further coupled to a multiplexer capable of combining the plurality of semiconductor diodes and generating the input light beam comprising one or more wavelengths.	“beam”	[AGREED]	[AGREED]	“photons or light transmitted to a particular location in space”

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9. The diagnostic system of claim 7, wherein at least the portion of the input light beam is adapted for use in a diagnostics to measure a property of the blood, wherein the diagnostics comprise a spectroscopic procedure, wherein the spectroscopic procedure is based at least in part on a comparison of amplitudes at a plurality of associated wavelengths transmitted or reflected from the blood.	“beam”	[AGREED]	[AGREED]	“photons or light transmitted to a particular location in space”
U.S. Patent No. 9,651,533				
Claim Language	Claim Term	Plaintiff’s Construction	Defendants’ Construction	The Court’s Construction
5. A measurement system comprising: a light source comprising a plurality of semiconductor sources that are light emitting diodes, the light emitting diodes configured to generate an output optical beam with one or more optical wavelengths, wherein at least a portion of the one or more optical wavelengths is a near-infrared wavelength between 700 nanometers and 2500 nanometers, the light source configured to increase signal-to-noise ratio by increasing a light intensity from at	“personal device”	[AGREED]	[AGREED]	“a computer or microprocessor-based device having a wireless receiver, a wireless transmitter, a display, a microphone, a speaker, one or more buttons or knobs, a microprocessor, and a touch screen”

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least one of the plurality of semiconductor sources and by increasing a pulse rate of at least one of the plurality of semiconductor sources; 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 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, wherein the receiver is configured to be synchronized to the light source; 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, the personal device configured to receive and process at least a portion of the output signal, wherein the personal device is configured to store and display the processed output signal, and wherein at least a portion of the processed output signal is configured to be transmitted over a wireless transmission link; and				
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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, to process the received output status to generate processed data and to store the processed data.				
11. The system of claim 5, wherein the receiver further comprises one or more filters in front of one of more detectors to select a fraction of the one or more optical wavelengths.	“one or more filters”	Plain and ordinary meaning	“one or more physical components or coatings configured to selectively pass light of a particular wavelength or range(s) of wavelengths”	
12. The system of claim 5, wherein the output optical beam comprises a plurality of optical wavelengths, and the output signal is generated in part by comparing signals at different optical wavelengths.	“beam”	[AGREED]	[AGREED]	“photons or light transmitted to a particular location in space”
U.S. Patent No. 10,517,484				
Claim Language	Claim Term	Plaintiff’s Construction	Defendants’ Construction	The Court’s Construction
8. The system of claim 7, wherein the wearable device is at least in part configured to identify an object , and a property of at least some of the output signal is compared by at least one of the wearable device, the smart phone or tablet to a threshold.	“to identify an object”	[AGREED]	[AGREED]	“to recognize or establish an object as being a particular thing”

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U.S. Patent No. 10,874,304				
Claim Language	Claim Term	Plaintiff's Construction	Defendants' Construction	The Court's Construction
<p>11. A measurement system comprising: a wearable measurement device for measuring one or more physiological parameters, including a light source comprising a plurality of semiconductor sources that are configured to generate an output optical beam with one or more optical wavelengths; the light source configured to increase signal-to-noise ratio by increasing a light intensity relative to an initial light intensity from at least one of the plurality of semiconductor sources; the wearable measurement device configured to receive a portion of the output optical beam and to deliver an analysis output beam to a sample; 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,</p>	“beam”	[AGREED]	[AGREED]	“photons or light transmitted to a particular location in space”

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generate an output signal representing at least in part a non-invasive measurement on blood contained within the sample, synchronize to the light source, capture light while the semiconductor sources are off and convert the captured light into a first signal, capture light while at least one of the semiconductor sources is on and convert the captured light into a second signal, the captured light including at least a part of the at least a portion of the analysis output beam reflected or transmitted from the sample, wherein the measurement system is further configured to improve the signal-to-noise ratio by differencing the first signal and the second signal; a smart phone or tablet 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, the smart phone or tablet configured to receive and process at least a portion of the output signal, to store and display the processed output signal, and to transmit a portion of the processed				
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output signal over a wireless transmission link; and a cloud configured to receive over the wireless transmission link an output status comprising the at least a portion of the processed output signal, to process the received output status to generate processed data and to store the processed data, and wherein the cloud is capable of storing a history of at least a portion of the received output status over a specified period of time.				
14. The measurement system of claim 11, wherein the plurality of semiconductor sources comprises at least one of: light emitting diodes (LEDs), laser diodes (LD's), tunable LD's, and super-luminescent laser diodes (SLDs), and the measurement system further comprising a reflective surface to receive and redirect at least some of the at least a portion of the analysis output beam reflected or transmitted from the sample.	“beam”	[AGREED]	[AGREED]	“photons or light transmitted to a particular location in space”
19. A wearable device for use with a smart phone or tablet, the wearable device comprising: a measurement device including a light source comprising a plurality of semiconductor sources for	“beam”	[AGREED]	[AGREED]	“photons or light transmitted to a particular location in space”
	“modulating at least one of the	No construction necessary apart from	“varying the amplitude, frequency,	

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<p>measuring one or more physiological parameters, the measurement device configured to: generate, by modulating at least one of the semiconductor sources having an initial light intensity, an input optical beam having one or more optical wavelengths, and receive and to deliver a portion of the input optical beam to tissue, wherein the tissue reflects at least a portion of the input optical beam delivered to the tissue; the measurement device further comprising a receiver configured to: capture light while the semiconductor sources are off and convert the captured light into a first signal, and capture light while at least one of the semiconductor sources is on and convert the captured light into a second signal, the captured light including at least a portion of the input optical beam reflected from the tissue; synchronize to the modulation of the at least one of the semiconductor sources; the measurement device further configured to improve a signal-to-</p>	<p>semiconductor sources having an initial light intensity”</p>	<p>the construction of “modulating” / “modulation” (<i>see</i> below)</p>	<p>or phase of the light produced by at least one of the semiconductor sources having an initial light intensity to include information”</p>	
	<p>“modulating” / “modulation”</p>	<p>“[varying/the varying of] the amplitude, frequency, or phase of the light produced”</p>	<p>No construction necessary apart from the construction of “modulating at least one of the semiconductor sources having an initial light intensity” (<i>see</i> above).</p> <p>If construed: “[varying/the varying of] the amplitude, frequency, or phase of the light produced by . . . to include information”</p>	

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noise ratio of the input optical beam reflected from the tissue by: differencing the first signal and the second signal, and increasing the light intensity relative to the initial light intensity from at least one of the semiconductor sources; the measurement device further configured to generate an output signal representing at least in part a non-invasive measurement on blood contained within the tissue; the wearable device configured to communicate with the smart phone or tablet, the smart phone or tablet comprising a wireless receiver, a wireless transmitter, a display, a voice input module, a speaker, and a touch screen; and the smart phone or tablet configured to: receive and to process at least a portion of the output signal, store and display the processed output signal, and transmit at least a portion of the processed output signal over a wireless transmission link.				
20. The wearable device of claim 19, wherein the light source is configured to further improve the signal-to-noise ratio of the input	“beam”	[AGREED]	[AGREED]	“photons or light transmitted to a particular location in space”

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optical beam reflected from the tissue by increasing a pulse rate of at least one of the plurality of semiconductor sources from an initial non-zero pulse rate.				
U.S. Patent No. 12,193,790				
Claim Language	Claim Term	Plaintiff's Construction	Defendants' Construction	The Court's Construction
7. An optical system, comprising: a wearable device for measuring one or more physiological parameters, the wearable device adapted to be placed on a wrist of a user; the wearable device including a light source comprising a plurality of semiconductor diodes that are configured to generate an output optical light having one or more optical wavelengths, wherein at least a portion of the one or more optical wavelengths is a near-infrared wavelength between 700 nanometers and 2500 nanometers; the wearable device comprising one or more lenses configured to receive at least a portion of the output optical light and to deliver a lens output light to tissue comprising skin; the wearable device further comprising a detection system	“to identify an object”	[AGREED]	[AGREED]	“to recognize or establish an object as being a particular thing”

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configured to receive at least a portion of the lens output light reflected from the tissue and to generate an output signal having a signal-to-noise ratio, wherein the detection system is configured to be synchronized to the light source; wherein the detection system comprises a plurality of detectors that are spatially separated from each other, and wherein at least one analog to digital converter is coupled to at least one of the plurality of detectors; wherein the output signal is indicative of the one or more of the physiological parameters; the wearable device configured to increase the signal-to-noise ratio by increasing light intensity of at least one of the plurality of semiconductor diodes from an initial light intensity; and the detection system further configured to: generate a first signal responsive to light received while the semiconductor diodes are off, generate a second signal responsive to light received while at least one of the semiconductor diodes is on, and				
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increase the signal-to-noise ratio by comparing the first signal and the second signal; and wherein the wearable device is at least in part configured to identify an object .				
U.S. Patent No. 12,268,475				
Claim Language	Claim Term	Plaintiff's Construction	Defendants' Construction	The Court's Construction
13. The wearable device of claim 8, wherein the processor is further configured to modulate the light source with a modulation frequency .	“modulate the light source with a modulation frequency”	No construction necessary apart from the construction of “modulate” / “modulation” (<i>see below</i>)	“vary the frequency of the light produced by the light source to include information”	
	“modulate” / “modulation”	“[vary/the varying of] the amplitude, frequency, or phase of the light produced”	No construction necessary apart from the construction of “modulate the light source with a modulation frequency” (<i>see above</i>). If construed: “[vary/the varying of] the amplitude, frequency, or phase of the light produced by . . . to include information”	