

UNITED STATES INTERNATIONAL TRADE COMMISSION  
WASHINGTON, D.C.

Before the Honorable Monica Bhattacharyya  
Administrative Law Judge

In the Matter of  
CERTAIN LIGHT-BASED PHYSIOLOGICAL  
MEASUREMENT DEVICES AND  
COMPONENTS THEREOF

Inv. No. 337-TA-1276

RESPONDENT APPLE INC.'S CORRECTED REPLY POST-HEARING BRIEF

**TABLE OF CONTENTS**

I.	INTRODUCTION .....	1
A.	The Parties .....	4
1.	Masimo & Cercacor .....	4
2.	Apple.....	6
B.	The Asserted Patents.....	10
1.	U.S. Patent Nos. 10,912,501, 10,912,502, and 10,945,648 .....	10
2.	U.S. Patent No. 10,687,745.....	11
3.	U.S. Patent No. 7,761,127.....	11
C.	The Products at Issue .....	12
1.	Masimo’s Domestic Industry Products.....	12
a.	Masimo Watch.....	12
b.	rainbow® Sensors.....	15
2.	The Accused Products.....	16
II.	JURISDICTION .....	16
III.	LEGAL STANDARD FOR DOMESTIC INDUSTRY REQUIREMENT.....	17
IV.	’501, ’502, AND ’648 PATENTS .....	18
A.	Noninfringement.....	20
1.	Apple’s Noninfringement Arguments Apply Plain Meaning .....	21
2.	No Protrusions, Openings, or Through Holes “Over” or “Above” Interior Surface or Photodiodes When Configured to Measure Physiological Parameter (’501 Claim 12; ’502 Claims 22 and 28; and ’648 Claims 24, 30).....	21
a.	The Accused Apple Watches Do Not Infringe .....	21
b.	Complainants’ Claim Construction Arguments Are Wrong.....	23
3.	No “Through Holes” or “Openings” “Through” the Protrusion (’501 Claim 12; ’502 Claims 22 and 28; and ’648 Claims 12, 24, and 30) .....	29
a.	The Accused Apple Watches Do Not Infringe .....	29
b.	Complainants’ Claim Construction Arguments Are Wrong.....	30
B.	No Domestic Industry – “Technical Prong” .....	34
1.	’501 Patent Claim 12 .....	38
a.	Element [1PRE], [1F] .....	38

	b.	Other Limitations .....	42	
2.	'502 Patent Claim 28 .....		44	
	a.	Element [28Pre], [28I] .....	44	
	b.	Element [28Pre], [28M] .....	44	
	c.	Other Limitations .....	45	
3.	'648 Patent Claims 12, 24, and 30 .....		45	
	a.	Element [8Pre], [8G], [20pre], [20E] .....	45	
	b.	Other Limitations .....	46	
C.	Invalidity .....		46	
	1.	Anticipation / Obviousness .....	48	
		a.	The Concepts in the Claims Had Been Known for Decades .....	48
		b.	Lumidigm Alone Anticipates the Asserted Claims or, at a Minimum, Renders Them Obvious.....	50
		c.	Alternatively, the Lumidigm Combinations Also Invalidate the Claims .....	59
		d.	IPRs Confirm Invalidity.....	65
		e.	No Secondary Considerations of Non-Obviousness.....	66
	2.	Invalidity Under 35 U.S.C. § 112 .....	73	
		a.	Claimed Combinations of LEDs, Photodiodes, and Openings .....	73
		b.	Other Section 112 Issues.....	75
D.	Unenforceability (Prosecution Laches & Unclean Hands).....		77	
V.	U.S. PATENT NO. 10,687,745 .....		79	
	A.	Noninfringement.....	81	
		1.	Complainants Misconstrue “First Shape.” .....	81
		2.	Complainants Fail To Show That The Accused Apple Watches Practice Limitations [1B] and [20B], Because Complainants Fail To Establish That The Identified “Material” Receives And “Changes” The “First Shape.” .....	83
		3.	Complainants Fail To Show That Apple Induces Infringement Of Claims 9 and 27 .....	88
	B.	No Domestic Industry – “Technical Prong” .....	88	
		1.	Element [15B].....	88
		2.	Element [15H].....	91

C.	Invalidity .....	94
1.	Obviousness Under 35 U.S.C. § 103 .....	94
a.	Series 0.....	94
b.	Iwamiya in View of Sarantos or Sarantos and Venkatraman .....	102
c.	No Secondary Considerations of Non-Obviousness.....	109
2.	Invalidity Under 35 U.S.C. § 112 .....	110
a.	Claims 1 and 20 Lack Written Description.....	110
b.	Claim 15 is Indefinite.....	110
D.	Unenforceability (Prosecution Laches).....	112
VI.	U.S. PATENT NO. 7,761,127 .....	112
A.	Noninfringement.....	114
1.	Complainants Improperly Offer New And Incorrect Definitions Of “Thermal Mass” And “Bulk Temperature For The Thermal Mass.”.....	114
a.	“A Thermal Mass” .....	116
b.	“Bulk Temperature For The Thermal Mass” .....	119
2.	Complainants Fail To Show That The Accused Apple Watches Have “A Thermal Mass” (Limitation [7A]).....	123
3.	Complainants Fail To Show That The Accused Apple Watches Determine A “Bulk Temperature For The Thermal Mass” (Limitation 7[F]) .....	127
B.	No Domestic Industry – “Technical Prong” .....	130
1.	Complainants Failed to Link Any Hearing Evidence to the Alleged Rainbow Sensors.....	130
2.	Rainbow Sensors lack “a thermal mass” – Limitation [7A].....	131
a.	Alleged Current Rainbow Sensors lack “a thermal mass.”.....	131
b.	Alleged Early Rainbow Sensors lack “a thermal mass.” .....	134
3.	Alleged Current and Early Rainbow Sensors lack a temperature sensor “capable of determining a bulk temperature for the thermal mass” – Limitation [7F] .....	135
a.	Alleged Current Rainbow Sensors.....	135
b.	Alleged Early Rainbow Sensors .....	136
C.	Invalidity .....	136
1.	Under Complainants’ Strained Interpretation of the Claims, a Temperature Sensor on a Conventional Circuit Board Renders Claim 9 Obvious .....	138

2.	Mendelson in Combination with Webster Renders Claim 9 Obvious.....	140
a.	Mendelson Renders the Claimed Thermal Mass Obvious.....	140
b.	Mendelson and Webster Render the Claimed Bulk Temperature Measurement Obvious.....	143
c.	Mendelson Discloses Limitation [7H].....	144
3.	Yamada in Combination with Noguchi Render Claim 9 Obvious .....	146
a.	Yamada Renders the Claimed Thermal Mass Obvious .....	146
b.	Yamada and Noguchi Render the Claimed Bulk Temperature Measurement Obvious.....	147
4.	No Secondary Considerations of Non-Obviousness.....	149
VII.	DOMESTIC INDUSTRY – ECONOMIC PRONG.....	150
A.	Lack of Significant Investment in Plant and Equipment .....	152
1.	Masimo Watch.....	152
a.	Unreliable Source Appendices.....	152
b.	Improper Reliance on Post-Complaint Evidence.....	154
c.	Claimed Expenditures Are Overstated.....	154
d.	No Demonstrated “Significance”.....	157
e.	Improperly Aggregated Expenditures.....	158
f.	Unsupported Claim of a Domestic Industry “in the Process of Being Established” .....	158
2.	Rainbow Sensors.....	159
a.	Claimed Expenditures Are Not Tied to Article(s) Identified Under the Technical Prong .....	159
b.	Unreliable Evidence and Allocations.....	160
c.	Claimed Expenditures Are Overstated.....	161
d.	No Demonstrated “Significance”.....	163
B.	Lack of Significant Employment of Labor or Capital .....	163
1.	Masimo Watch.....	163
a.	Unreliable Source Appendices.....	163
b.	Improper Reliance on Post-Complaint Evidence.....	164
c.	Non-Qualifying Expenditures.....	164
d.	Complainants’ Claimed Expenditures Are Overstated.....	164
e.	No Demonstrated “Significance”.....	170

# 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.