UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD
MEDIMO DIO

MEDIVIS, INC.
Petitioner

v.

NOVARAD CORP.
Patent Owner

US Patent No. 11,004,271

Inter Partes Review No. IPR2023-00042

PETITION FOR *INTER PARTES* REVIEW OF US PATENT NO. 11,004,271 UNDER 35 USC §§ 311-319 AND CFR § 42.100, et. seq.



				Page		
I.	INTRODUCTION1					
	A.	The Parties				
	B.	Mandatory Notices And Certifications				
		1.	Real Party-in-Interest	2		
		2.	Related Matters	2		
		3.	Counsel and Service Information	3		
		4.	Standing	4		
II.	THE '271 PATENT AND ITS PROSECUTION					
	A.	The Challenged '271 Patent				
	B.	Summary of the Challenged Claims5				
	C.	Reasons for Allowance of the Challenged Claims				
III.	CLAIM CONSTRUCTION					
	A.	Legal Standard for Construction				
	B.	The Field of the Invention and Person of Ordinary Skill in the				
		Art				
	C.	Clai	m Terms	11		
		1.	"three-dimensional (3D) data" and "3D data"	11		
		2.	"virtual 3D shape"	13		
		3.	"being having"	14		
		4.	Summary Table of Claim Interpretation	14		
IV.	STANDARDS AND CONTEXT FOR EVALUATION OF PATENTABILITY CHALLENGES					
	A.	The Legal Standards for Anticipation and Obviousness				
	B.	The Scope and Content of the Prior Art1				
V.	THE CHALLENGED CLAIMS ARE UNPATENTABLE29					
	A.	Summary of Grounds for Challenging Claims29				



1.		s Disclosure with respect to Independent n 1
	(a)	"A method for augmenting real-time, non- image actual views of a patient with three- dimensional (3D) data" (Preamble of Claims 1, 7, and 11)
	(b)	"identifying 3D data for the patient, the 3D data including an outer layer of the patient and multiple inner layers of the patient" ("identifying" step of Claims 1, 7, and 11)
	(c)	"displaying, in an augmented reality (AR) headset, one of the inner layers of the patient from the 3D data projected onto real-time, non-image actual views of the outer layer of the patient" ("displaying inner layer[]" step of Claims 1, 7, and 11)
	(d)	"the projected inner layer of the patient from the 3D data being confined within a volume of a virtual 3D shape" ("confined" limitation of Claim 1)
2.	Doo'.	s Disclosure with respect to Dependent
	Clair	ns 5 and 6
	(a)	Claim 5: "The method of claim 1, wherein lines of the virtual 3D shape are hidden."
	(b)	Claim 6: "One or more non-transitory computer-readable media storing one or more programs that are configured, when executed, to cause one or more processors to perform the method as recited in Claim 1."



1. Mo	tive to Combine <i>Doo</i> and <i>Amira</i> 42			
2. Dis	Disclosure with Respect to Claims 1-6			
(a)	Claim 1 limitations including "the projected inner layer of the patient from the 3D data being confined within a volume of a virtual 3D shape"			
(b)	Claim 2: "The method of claim 1, wherein: the virtual 3D shape is a virtual box; and the virtual box includes a top side, a bottom side, a left side, a right side, a front side, and a back side."			
(c)	Claim 3: "The method of claim 1, [3a] wherein: the virtual 3D shape is configured to be controlled to toggle between displaying and hiding lines of the virtual 3D shape; and [3b] the virtual 3D shape is configured to be controlled to reposition two-dimensional (2D) slices and/or 3D slices of the projected inner layer of the patient from the 3D data."			
(d)	Claim 4: "The method of claim 1, wherein lines of the virtual 3D shape are displayed."4:			
(e)	Claim 5: "The method of claim 1, wherein lines of the virtual 3D shape are hidden."40			
(f)	Claim 6: "One or more non-transitory computer-readable media storing one or more programs that are configured, when executed, to cause one or more processors to perform the method as recited in claim 1"			



		Page					
	(a)	"altering the original color gradient of the multiple inner layers to be lighter than the original color gradient in order to be better visible when projected onto real-time, non-image actual views of the outer layer of the patient" ("altering" step of Claim 11)					
	(b)	"the projected inner layer of the patient from the 3D data being having the altered color gradient" ("altered color" limitation of Claim 11)					
4.	Disclosure with respect to Dependent Claims 12-						
	20	52					
	(a)	Claim [12/13/14/15/16/17/18/19]: "The method as recited in claim 11, wherein the altered color gradient represents a tissue [hardness/relaxivity/echogenicity/enhancement amount/enhancement speed/radioactivity/water content] tissue property of the multiple inner layers of the patient					
	(b)	Claim 20: "One or more non-transitory computer-readable media storing one or more programs that are configured, when executed, to cause one or more processors to perform the method as recited in claim 11."					
Grou	nd 3: C	Obviousness of Claims 1-6 and 11-20 Over <i>Chen</i> in					
view	of <i>3D</i>	Visualization and 3D Slicer54					
1.		ve to Combine <i>Chen</i> with <i>3D Slicer</i> and <i>3D</i>					
2.	Discl	osure with Respect to Independent Claim 1 55					
	(a)	preamble of Claim 155					



D.

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.

