UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Medivis, Inc.
Petitioner

v.

Novarad Corp.
Patent Owner

Case IPR2023-00042
US Patent No. 11,004,271

DECLARATION OF CRAIG ROSENBERG, Ph.D.

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

TABLE OF CONTENTS

I. QUALIFACTIONS 7

II. MY EXPERTISE AND THE PERSON OF ORDINARY SKILL IN THE ART 15

III. LEGAL STANDARDS 17

IV. OVERVIEW OF THE USE OF AUGMENTED REALITY (AR) AT THE TIME OF THE '271 PATENT (MARCH 2017) 20

V. THE '271 PATENT AND THE CHALLENGED CLAIMS 22

A. The '271 Patent Provides a Novel Virtual Control for Navigating 3D Medical Data Projected in an Augmented Reality (AR) Environment. 22

B. Virtual Controls in an AR Environment Are Very Different From Using a Mouse, Keyboard, and Conventional Computer Monitor. 25

VI. CONSTRUCTION OF CERTAIN CLAIM TERMS 27

1. "three-dimensional (3D) data … including an outer layer of the patient and multiple inner layers of the patient" 29

2. "inner layer(s) of the patient" 30

3. "being confined within a virtual 3D shape" 31

4. "being having" 35

5. Summary Table of Claim Interpretation 35

VII. ANALYSIS OF THE PRIOR ART 36

A. Doo (Ex. 1008) 36

B. Chen (Ex. 1009) 39

C. 3D Slicer (Ex. 1010) 41

D. 3D Visualization (Ex. 1007) 44

E. Amira (Ex. 1005) 45

VIII. GROUNDS OF PATENTABILITY 49

A. Ground 1: *Doo* Does Not Disclose All of the Elements of Claims 1, 5, and 6. 49

1. *Doo* does not disclose all of the elements of independent claim 1. 49

2. *Doo* does not disclose all of the elements of dependent claims 5 and 6. 53

B. Ground 2: *Doo* Alone or in View of *Amira* Does Not Render Claims 1-6 Obvious. 54

1. Non-disclosure with respect to claims 1-6 54

DOCKET ALARM Find authenticated court documents without watermarks at docketalarm.com.

2. Non-disclosure with respect to independent claim 11 59
3. Non-Disclosure with respect to claims 12-20 62
4. No motive to combine *Doo* and *Amira* 63
C. Ground 3: *Chen* in View of *3D* Visualization and *3D Slicer* Does Not Render Claim 1-6 and 11-20 Obvious. 65
1. *Chen's*, *3D Slicer*'s, and *3D Visualization*'s non-disclosure with respect to independent claim 1 65
2. *Disclosures of Chen, 3D Slicer,* and *3D Visualization* with respect to dependent claims 2-6 68
3. *Chen's* disclosure with respect to independent claim 11 73
4. Non-disclosure with respect to dependent claims 12-20 74
5. No motive to combine *Chen* and *3D Slicer* or *3D Visualization* 75

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

I, Craig Rosenberg, Ph.D., declare as follows:

1. I am over 21 years of age and otherwise competent to make this declaration. I make this declaration based upon facts and matters within my own knowledge and on information provided to me by others.

2. I have been retained as an expert witness to provide testimony on behalf of Novarad Corp. ("Patent Owner") as part of the above-captioned *inter partes* review proceeding ("IPR").

3. More specifically, I have been asked primarily to assist in evaluating the grounds raised in the Petition (Paper 3) and in Dr. Kazanzides' declaration (Ex. 1012) in support of that Petition.

4. I reserve the right to supplement this declaration in response to additional evidence that may come to light.

5. I am not currently, nor have I ever been, employed by Patent Owner. Nor have I previously served as an expert witness on behalf of Patent Owner.[1]

6. I understand that Patent Owner owns U.S. Patent No. 11,004,271 ("the '271 Patent"), entitled AUGMENTING REAL-TIME VIEWS OF A PATIENT WITH THREE-DIMENSIONAL DATA," the validity of which Medivis, Inc. ("Petitioner") challenges.

[1] Nor have I performed work for, met, or ever spoken with Dr. Steven Cvetko or Dr. Wendell Gibby, the named inventors in the '271 Patent.

DOCKET ALARM Find authenticated court documents without watermarks at docketalarm.com.

7. I have reviewed the specifications of the ’271 Patent as well as its prosecution history. I am familiar with the ’271 Patent. A copy of the ’271 Patent was provided as Exhibit 1001.

8. I am familiar with the technology at issue at the time of the ’271 Patent, which Petitioner has assumed to be on or before March 30, 2017. Petition at 10.

9. I have also reviewed the Petition. The Petition presents several grounds for challenging the claims of the ’271 Patent, which appear deficient to me for reasons I address in more detail below. *See infra* at ¶¶ 121-188.

10. I have also reviewed the declaration of Dr. Kazanzides (Ex. 1012), which I also address.

11. I have also reviewed the following references cited by Petitioner as prior art and other documents included in the exhibit list below:

Exhibit	Description
Ex. 1001	U.S. Patent No. 11,004,271 (the ’271 Patent)
Ex. 1002	Excerpts of file history of Application No. 16/574,524, now the ’271 Patent
Ex. 1003	Excerpts of file history of Application No. 15/894,595, now U.S. Patent No. 10,475,244.
Ex. 1004	Excerpts of file history of Application No. 15/474,702, now U.S. Patent No. 9,892,564.

DOCKET ALARM Find authenticated court documents without watermarks at docketalarm.com.

DOCKET ALARM

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.