# 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 MAHESH S. MULUMUDI, M.D.



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2.	Doo does not anticipate dependent claims 5 and 6
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1.	Non-disclosure with respect to claims 1-6
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4.	No motive to combine <i>Doo</i> and <i>Amira</i>
C. C	Ground 3: Chen in View of 3D Visualization and 3D Slicer Does Not Render Claim 1-6
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1.	Chen's non-disclosure with respect to independent claim 1
2.	Chen's disclosure with respect to dependent claims 2-6
3.	Chen's disclosure with respect to independent claim 11
4.	Non-disclosure with respect to dependent claims 12-20
5.	No motive to combine <i>Chen</i> , <i>3D Visualization</i> , and <i>3D Slicer</i>



### I, Mahesh S. Mulumudi, M.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.

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- 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.

<sup>&</sup>lt;sup>1</sup> 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.



- 7. I have reviewed the specification 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 ¶¶ 98-179.
- 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.



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