

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE TRIAL AND APPEAL BOARD

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FUSION ORTHOPEDICS, LLC,  
Petitioner,

v.

EXTREMITY MEDICAL, LLC  
Patent Owner.

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Case IPR2023-00894  
Patent 11,298,166

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**DECLARATION OF ELI JACOBSON**

I, Eli Jacobson, declare as follows:

1. I am an employee of Fusion Orthopedics USA, LLC and have been employed by them since 2023 as Director of Engineering and Regulatory Affairs. I was employed as Associate Director of Engineering at Fusion Orthopedics, LLC from 2017 to 2023. I hold a Bachelor of Science in Biomedical Engineering from The Arizona State University.
2. I have 15 years' experience developing 3D models. In that time, I have developed hundreds of 3D models. In particular, I have 7 years' experience developing 3D models of medical devices.
3. I have 15 years' experience developing solid models in computer-aided design (CAD) systems such as Solidworks. I have about 6 years' experience developing 3D mesh models in software packages such as Blender.
4. I was asked by Jennifer Brinkerhoff to prepare two 3D models based on (1) Figure 18 of U.S. Patent No. 11,298,166 (the "'166 patent") and (2) Figures 9, 10, and 11 of the '166 patent. Ms. Brinkerhoff gave me copies of pages 65, 66, 67, and 74 of Exhibit 2021 in this proceeding, which she informed me contained the versions of those figures as

originally filed in the predecessor patent application to the '166 patent.

5. Ms. Brinkerhoff instructed me to conform as closely as possible to the source figures when preparing the models such that all features visible in the source figures would appear in the model exactly as shown in the figures.
6. Ms. Brinkerhoff also provided me with copies of pages 17-20, 34-38, and 43-45 from Exhibit 2020 in this proceeding, which I am informed contain portions of the '166 patent specification. Ms. Brinkerhoff instructed me to conform as closely as possible to these portions of the specification when creating each model relating to the respective figures. Ms. Brinkerhoff specially drew my attention to disclosure on these pages that the lag screw member 815/1805 has a tapered bulbous member that is received in the first bore with a locked interference fit so as to have a fixed angle and instructed me to ensure that the models would exhibit these properties.
7. Ms. Brinkerhoff further instructed me to attempt to create the models in such a way that simultaneously (a) conformed to the source figures and specification described above and (b) showed that the tapered bulbous member of the lag screw member did not abut the interior surface of the first bore at the aperture on the exterior surface of the tapered screw member facing the tip of the lag screw member.

8. I directed and supervised the work to create the models in accordance with Ms. Brinkerhoff's instructions. First, I and another employee working entirely under my direction and supervision created solid models in the Solidworks software application. Then I and another employee working entirely under my direction and supervision imported the solid models into the Blender software application to adapt the solid models into 3D mesh models. My team and I were able to comply with Ms. Brinkerhoff's instructions. That is, we created models that conformed with both the source figures and the description of those figures in the '166 patent specification, and yet lacked the abutment described above.
9. Each of the models includes (a) a reproduction of the source figure, (b) the principal parts of the assembly shown in the source figure, and (c) cross-sectional views of the assembly.
10. The "Fig-18-final.blend" and "Fig-9-final.blend" computer files introduced in this proceeding as Exhibits 1045 and 1046, respectively, are the results of the work of my team. I have reviewed the contents of these files in the Blender software, and I confirm that they are the files my team created.
11. Exhibits 1047 and 1048 are video files that I am informed were prepared

by Scott Kamholz by recording his computer screen while scanning, panning, and rotating the view of “Fig-18-final.blend” and “Fig-9-final.blend” respectively in Blender. I have reviewed these exhibits and confirm that they are true and accurate video animations of the models my team prepared.

12. Exhibits 1049 and 1050 include still images that I am informed were prepared by Scott Kamholz by viewing the “Fig-18-final.blend” and “Fig-9-final.blend” Blender respectively and extracting screen captures. I have reviewed these exhibits and confirm that they are true and accurate still images from the models my team prepared.
13. I declare that all statements made herein are of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements are made with the knowledge that willful false statement and the like so made are punishable by fine or imprisonment, or both under Section 1001 of the Title 18 of the United States Code.

Dated: May 3, 2024

By: /Eli Jacobson/  
Eli Jacobson