

Filed on behalf of Patent Owner 3Shape A/S

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

EXOCAD GMBH and EXOCAD AMERICA, INC.
Petitioners

v.

3SHAPE A/S
Patent Owner

Case No. IPR2018-00785
Patent 9,336,336

**PATENT OWNER'S PRELIMINARY RESPONSE TO THE PETITION
FOR *INTER PARTES* REVIEW FOR U.S. PATENT NO. 9,336,336
PURSUANT TO 35 U.S.C. § 313 AND 37 C.F.R. § 42.107**

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B. “arrange the at least one 2D image relative to the 3D virtual model in a virtual 3D space such that the at least one 2D image and the 3D virtual model are aligned when viewed from a viewpoint and remain separate representations after being arranged”	13
C. “render a part of the at least one 2D image that includes teeth at least partly or wholly transparent”	14
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3. Petitioner fails to articulate a reason with rational underpinnings for modifying Malfliet to arrive at the claimed recitation “remain separate representations after being arranged.”	25

4. A POSITA would have understood that “embedded” means that the data does not remain as separate representations after being arranged.27
5. Kopelman and Wiedmann fail to cure the above-described deficiencies of Malfliet.29
 - a. Petitioner does not provide a reason with rational underpinnings for combining Kopelman and Wiedmann with Malfliet to arrive at the 2D image and 3D virtual model remaining as separate representations after being arranged.30
 - b. Petitioner fails to demonstrate that Kopelman discloses the claimed feature “remain separate representations after being arranged.”34
 - c. Petitioner fails to demonstrate that Wiedmann discloses the claimed feature “remain separate representations after being arranged.”36
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 1. Petitioner fails to demonstrate that Malfliet discloses or suggests either virtually cutting at least a part of teeth out of the 2D image or rendering a part of the 2D image that includes teeth at least partly or wholly transparent.42
 2. Petitioner fails to demonstrate that Kopelman and Wiedmann cure the above-described deficiencies of Malfliet.45

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a.	Kopelman fails to disclose or suggest either virtually cutting at least a part of teeth out of the 2D image or rendering a part of the 2D image that includes teeth at least partly or wholly transparent.	45
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APPENDIX A - LIST OF EXHIBITS

CERTIFICATE OF COMPLIANCE WITH 37 C.F.R. § 42.24

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