# 3D models and 3D images

#### Response ID:286 Data

#### 1. Country code page

1. Please enter the two-letter country code corresponding to your Office or Organization. Don't know your country code? Please click here.

US

Please enter your email address so we can contact you if we have questions about your response.

### 2. Questions page

This survey was approved by the seventh session of the CWS to collect information on practices and expectations of IPOs and users (applicants) for 3D models and 3D images.

### **Applicant Input**

It is hoped that IPOs will consider the views of IP applicants, including industry, when formulating their responses. For this purpose, a Model Questionnaire For Industry On The Design Of Objects For IP Rights Protection Using 3D Models And Images has been prepared. IPOs are encouraged to consider this model questionnaire as a guide for them to collect relevant information on the views of applicants.

## MODEL QUESTIONNAIRE FOR INDUSTRY ON THE DESIGN OF OBJECTS FOR IP RIGHTS PROTECTION USING 3D MODELS AND IMAGES

### Glossary

3D model – An electronic file that is created by specialized software, for mathematically representing the surface of an object in three dimensions

3D Images – Images that represent objects displayed in three dimensions (length, depth, height), e.g. 3D photos, stereoscopy, etc.

3DS - A file format used by the Autodesk 3ds Max 3D modeling, animation and rendering software

**DWF – Design Web Format** 

- DWG A file format widely used for CAD drawings
- **IGES Initial Graphics Exchange Specification**
- OBJ An open geometry vertex file format used for CAD and 3D printing

Raster image - An image that is composed of a map of points (pixels), referred to as a bitmap. Typical file formats for

raster images include JPEG, TIFF, PNG and BMP

STL – Standard Tessellation Language - a file format native to the stereolithography CAD software created by 3D Systems

STEP – Standard for the Exchange of Product model data –an open ISO Standard which can represent 3D objects in Computer-aided design (CAD) and related information

Vector graphics – An image file that is composed of shapes formed of mathematical formulas and coordinates on a 2D plane. As opposed to raster images, vector graphicshave the property of scaling infinitely without any degradation of quality

X3D – Successor of VRML, an Open ISO Standard XML format

# Part 1. IP objects and stages of their lifecycle

### 2. 1.1. Does your office currently use 3D models or 3D images for IP objects within the office? If so, for which IP objects Trademarks

Other (please specify): Trademarks Office currently accepts 3D images and stores as 2D image. The Description of Mark references the mark as 3D. Design Patents- Other (please specify): We have interpreted the definitions in this survey to mean that "3D images" encompasses mathematical models that can be virtually manipulated in three dimensions, such as CAD drawings. For design patent applications, USPTO only accepts static 2D image files which may convey 3D features through the use of, for example, shading and perspective.

#### 3. 1.2. Does your office consider using 3D models or 3D images for IP objects in the future? If so, for which IP objects

Other (please specify): Design Patents- Other (please specify): The USPTO's existing plans for 3D models and 3D images include permitting exhibition or demonstration of such by applicants during examiner interviews, per MPEP 713.08. Future plans include studying 3D models and 3D images as they pertain to patent applications. Trademarks Office may consider using 3D images for IP objects in the future. The Office has not determined which IP object to be considered 3D images.

#### 4. 1.3. On which stages of IP objects' lifecycle does your office currently accept/implement 3D models?

	Filing of the application	Examination	Storage	Search	Publication	Data exchange	Other (please specify in comments)
Trademarks							
Industrial designs							
Patents in chemistry as a field of technology (e.g. chemical structures, biological structures)							
Patents (e.g. inventions and/or utility models) in other fields of technology except chemistry							
Integrated circuit topology							

**Comments:** Under the interpretation that "accept/implement" means "formally enter into an application file wrapper", USPTO does not accept or implement 3D models at any of the listed stages for design patent applications. Integrated Circuit Topology (mask works) is covered by the Semiconductor Chip Protection Act ("SCPA") of 1984, 17 U.S.C. §§ 901-14. TM is only accepting 2D image. However, the Description of Mark can describe the 3D image of the Mark.

	Filing of the application	Examination	Storage	Search	Publication	Data exchange	Other (please specify in comments)
Trademarks							
Industrial designs							
Patents in chemistry as a field of technology (e.g. chemical structures, biological structures)							
Patents (e.g. inventions and/or utility models) in other fields of technology except chemistry							
Integrated circuit topology							

**Comments:** USPTO accepts PDF image files, which are transformed to TIFF files and used in examination, search, publication and data exchange systems. The originally submitted PDF image file is also available for examiners and the public. USPTO receives JPEG image files for Hague applications, which are transformed to PDF files. These files are used in examination. The files are transformed to TIFF images for search, publication and data exchange. The originally submitted JPEG and PDF image files are also available for examiners and the public to view. Trademarks does not currently conduct any transformations of image files.

#### 6.1.5. On which stages of IP objects' lifecycle does your office consider accepting/implementing 3D models in the future?

	Filing of the application	Examination	Storage	Search	Publication	Data exchange	Not sure	Other (please specify in comments)
Trademarks								
Industrial designs								
Patents in chemistry as a field of technology (e.g. chemical structures, biological structures)								
Patents (e.g. inventions and/or utility models) in other fields of technology except chemistry								
Integrated circuit topology								

**Comments:** USPTO continues to study 3D models and 3D images in reference to patent applications and monitor progress in this area. At this point, TM is not sure when TM will start accepting 3D images and in what format. TM will continue allowing applicants to describe the 3D mark.

## Part 2. Existing practices and future plans

#### 7.2.1. Please describe existing practices/future plans for using 3D models and 3D images within your office

USPTO's existing plans for 3D models and 3D images include permitting exhibition or demonstration of such by applicants during examiner interviews, per MPEP 713.08. Future plans include studying 3D models and 3D images as they pertain to

patent applications. The current practice at TM for 3D image is required to describe the 3D image in the Description of Mark field. Submit 2D image.

## Part 3. Regulations

#### 8.3.1. What laws and regulations concerning 3D models and 3D images are implemented within your jurisdiction?

37 CFR 1.91-37 CFR 1.91 Models or exhibits not generally admitted as part of application or patent.

MPEP 608.03(a)- 608.03(a) Handling of Models, Exhibits, and Specimens [R-07.2015]

MPEP 713.08- 713.08 Demonstration, Exhibits, Models [R-07.2015]

TM has not accepted 3DM images so therefore there is no laws or regulations. Guidance on examining 3D image has issued.

## Part 4. Formats and technical tools

9.4.1. Which formats of 3D models or 3D images does your office use at the moment? Does your office use the same or different formats for different stages of lifecycle: filling, examination, publication etc.?

N/A - For design patent applications, USPTO only accepts static 2D image files

10. 4.2. Which formats of 3D models or 3D images does your office consider using in the future? Does your office consider using the same or different formats for different stages of lifecycle: filling, examination, publication etc.?

USPTO has not determined the format. Hopefully, 3D model and 3D image standard can provide a format that can be used across the board.

11. 4.3. Please provide us with your suggestions and proposals on formats and reasons why you suppose them to be important (a list of formats to consider) except mentioned in items 6.1, 6.2

N/A

12. 4.4. Which technical tools does your office currently use to work with 3D models (i.e. viewers, converters, etc.)? Are these standard tools commercially available, or do you consider using any special tool developed for your Office or by your Office?

N/A

13. 4.5. Which technical tools does your office consider using in future work with 3D models (i.e. viewers, converters, etc.)? Are these standard tools commercially available, or do you consider using any special tool developed for your Office or by your Office?

N/A

14. 4.6. Please provide us with your suggestions and proposals on tools and reasons why do you suppose them to be important (a list of tools to consider)

N/A

## Part 5. Specific requirements and limitations

15.5.1. Please provide us with preferable specific file requirements? Should they be the same or different for different objects and stages (i.e. limitations and restrictions for 3D files, size (Mb) and format of 3D model for storing, processing, and sharing, etc.)

N/A

16.5.2. In your opinion, what would be the main requirements when choosing 3D file formats (open source, wide spread adoption, etc.)

For TM, In my opinion, the main requirement shall be adaptable and widely supportable

17.5.3. In your opinion, what would be the main requirements when choosing tools for working with 3D files?

For TM, In my opinion, the requirement for tool shall be free for viewing, backward compatible, open source for editing.

## Part 6. Expectations concerning the use of 3D

18.6.1. Which specific advantages and/or drawbacks do you expect from 3D models and 3D images regarding search, for instance prior art search?

N/A

19. 6.2. Do you expect that applicants will comply to provide 3D models which fulfill the defined standards?

N/A

## Part 7. Other

20.7.1. Do you have any other comments?

None

### 3. Review Page

You have reached the end of the survey questions. Your answers have been saved.

If you or your colleagues wish to revise your answers later, you can use the link emailed to you with the Save and Continue option in the top right of this page. The Review or Back button below will return you to your answers.

When you are ready to submit your final answers, click the Submit button below. You will no longer be able to edit your responses after clicking Submit.

You may download a copy of your answers:

### 4. Thank You!

Thank you for taking our survey. Your response is very important to us.