3D models and 3D images

Response ID:14 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.

NO

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

Other (please specify): If filed, treated as physical objects (goods) for trademark and design, and not part of application

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

Trademarks
Industrial designs

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							X
Industrial designs							X
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: Allow filing of 3D-objects/models/images, as supplement for understanding of design or trademark.

5. 1.4. Does your Office carry out any image transformations? If so, for which objects and on which stages?

	Filing of the application	Examination	Storage	Search	Publication	Data exchange	Other (please specify in comments)
Trademarks	X		X	X	X		
Industrial designs	X		X	X	X		
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: Limited to 2D tranformations: file type conversion, file size and resolution., thumb and publication representation creations. Plan to implement 2D rendition of 3D and video for GUI usage.

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	X		X		X	X		
Industrial designs	X		X		X	X		
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: We hope to limit the need for transformation to zero: The filed object is unchanged throughout any processing and publication, except production of thumbs for GUI representations.

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

By 2020 allow 3D objects as trademarks, including web publishing with URL/URI from gazette. 3D objects must follow specified formats and other limitations (e.g. size). Due to archive regulatons (long term preservation) only ISO standards allowed. Auto extract of images for thumb generation for search applications and web functionality.

Part 3. Regulations

8. 3.1. What laws and regulations concerning 3D models and 3D images are implemented within your jurisdiction?

None at moment. New trademark regulations are suggested, but currently not in force.

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.?

Only specified video, 3D, or other object, if format follows ANY ISO standard, due to national archive standards (Long time preservations). Only MPEG video formats (MPEG2 & MPEG4 is specifically recommended). Otherwise set of 2D representations may be filed with description for unique representatin of 3D shape or movement.

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.?

We will follow recommendations in WIPO standard, even if only industrial standard (Non ISO). ISO standardized formats will be supportet (X3D and STEP). We believe that central archive authority will allow industry standard if it is WIPO recommendation.

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

STEP due to ISO standard and wide use.
STL due to standardization and focus on surface/form
X3D, due to standardization and beeing the most modern and versatile standardized format
To be evaluated: COLLADA, widely used in games, and now an open format.

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?

VLC Media Player, available for free.

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?

Acsepto v11 and later. Commerciarl proprietar product by Sword-Group SA, France.
VLC Media Player

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)

NA

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.)

For any object: Recommended max size should be 5Mb, due to exchange and publisihing need.

16. 5.2. In your opinion, what would be the main requirements when choosing 3D file formats (open source, wide spread adoption, etc.)

All: ISO standard
TM/DS: Wide adoption within field (of design, gaming, or where 3D usage with focus on the human recognizable form/view)
PT: Wide adoption within technical design (CAD).

17. 5.3. In your opinion, what would be the main requirements when choosing tools for working with 3D files?

Price and file coverage, ability to convert between formats, ability to save 2D snaps. Support for web publishing.

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?

There is a demand to create - at least semi automated - 2D-representations from filed 3D object files.
TM: Our image recognition search based on ML will not cover 3D objects. Instad we will generate up to four representatble 2D- images that can be individually search and be search. Automation of 2D-representation may be useless, hence may need additional resources for manual rendering assitance.
TM & DS: 2D representations will be used for manual search.
Traditional CAD images in 3D may not be accepted since they do not represent the human vision of the object.

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

Yes, otherwise more costly duration of application processing time. We will refuse applications based on non-reproducable file formats.

Part 7. Other

20. 7.1. Do you have any other comments?

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.