3D E-filing System in KIPO

Korean Intellectual
Property Office

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I.   Background

- Context of Industrial Design Practice

Image courtesy: carbodydesign.com

- Drawing Requirement of Design Filing

Image courtesy: Kwon, sunhan
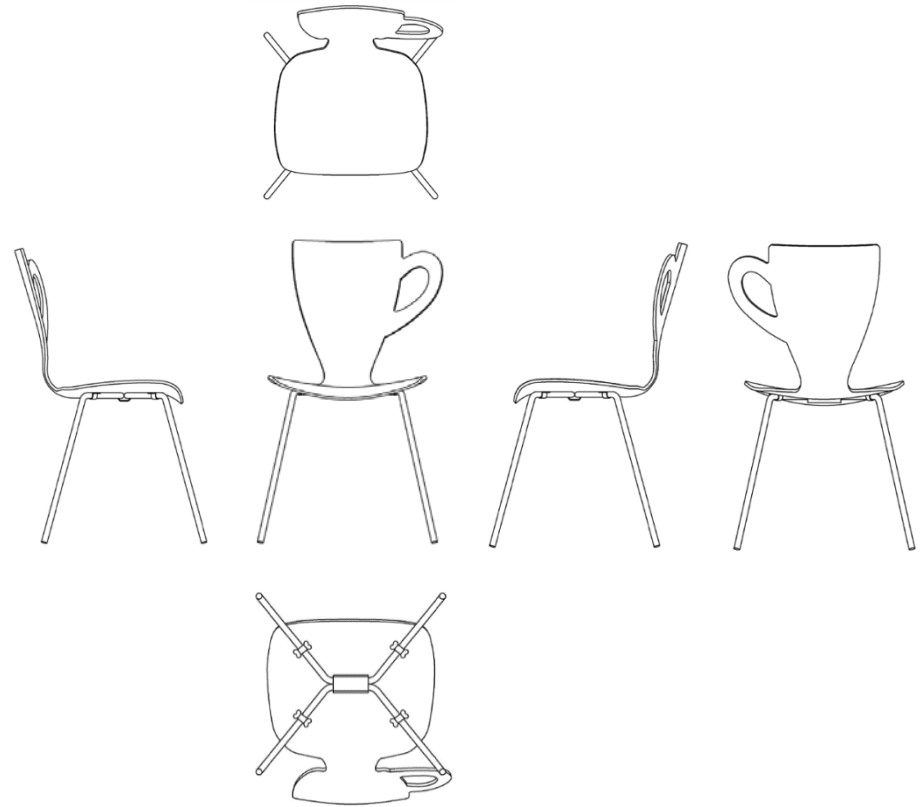
- Benefits of 3D format application

designer ➡ **examiner** ➡ **public**

[3D filing]   [3D analysis]   [3D disclosure]

"from filing to disclosure, digitally and seamlessly "

"convenient, efficient and user-friendly"

Benefits of 3D CAD format application
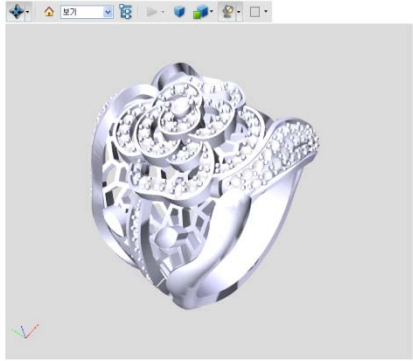
- 3D file can be submitted instead of design drawing from Jan.1, 2010

- Available 3D programs
  - ✓ Auto CAD
  - ✓ 3DS Studio MAX
  - ✓ ALIAS studio
  - ✓ Rhino ceros
  - ✓ Pro/ENGINEER
  - ✓ Solidworks
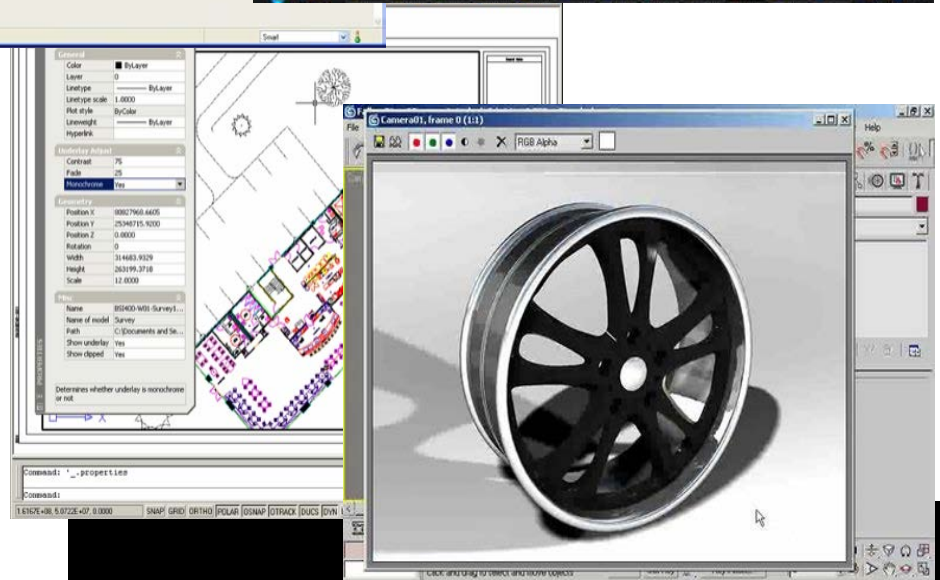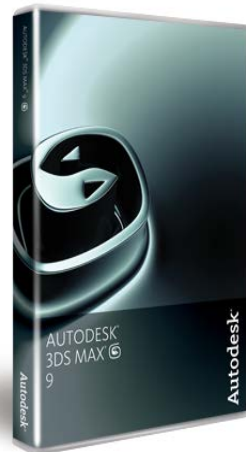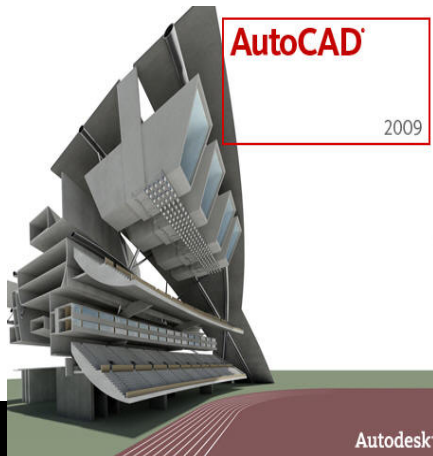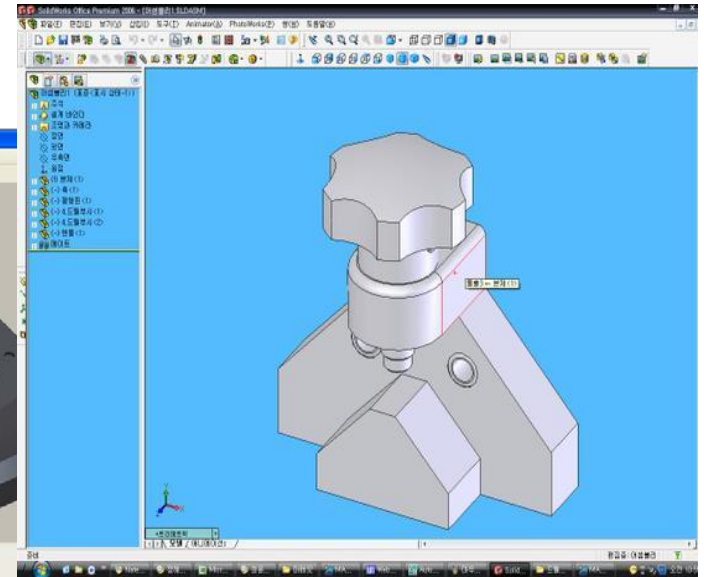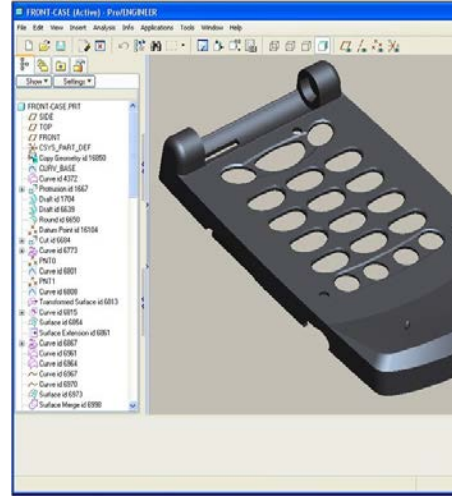
- identify the characteristic figures with enlarge, reduce, move, and rotate 3D image through **CADian viewer**
- The design Examination process is the same as the usual design Examination.
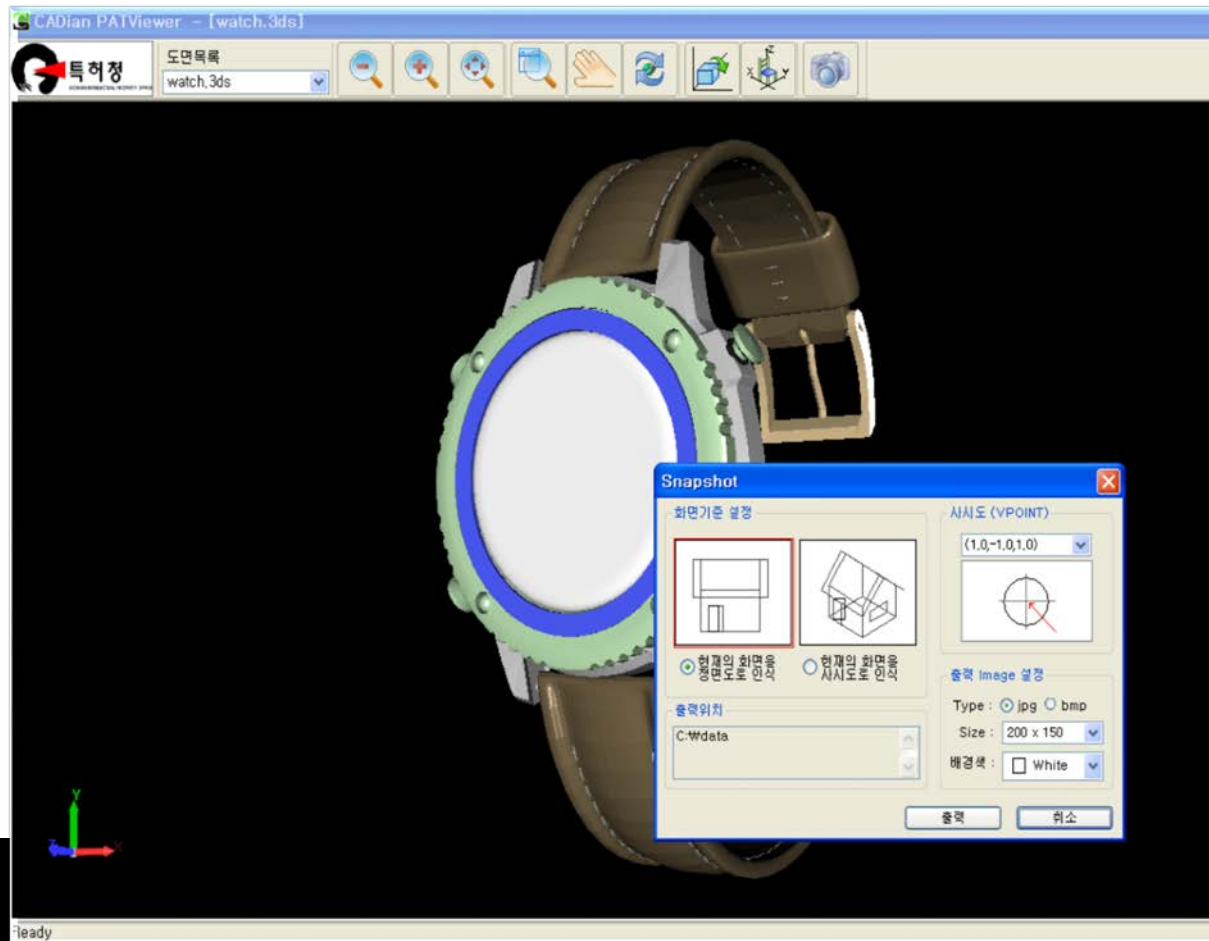
🔵 extract 2D reproduction from 3d-file with snapshot viewpoint
    assigned.

After registration, Uploading the 2D reproduction(perspective, 6views) data to the search DB
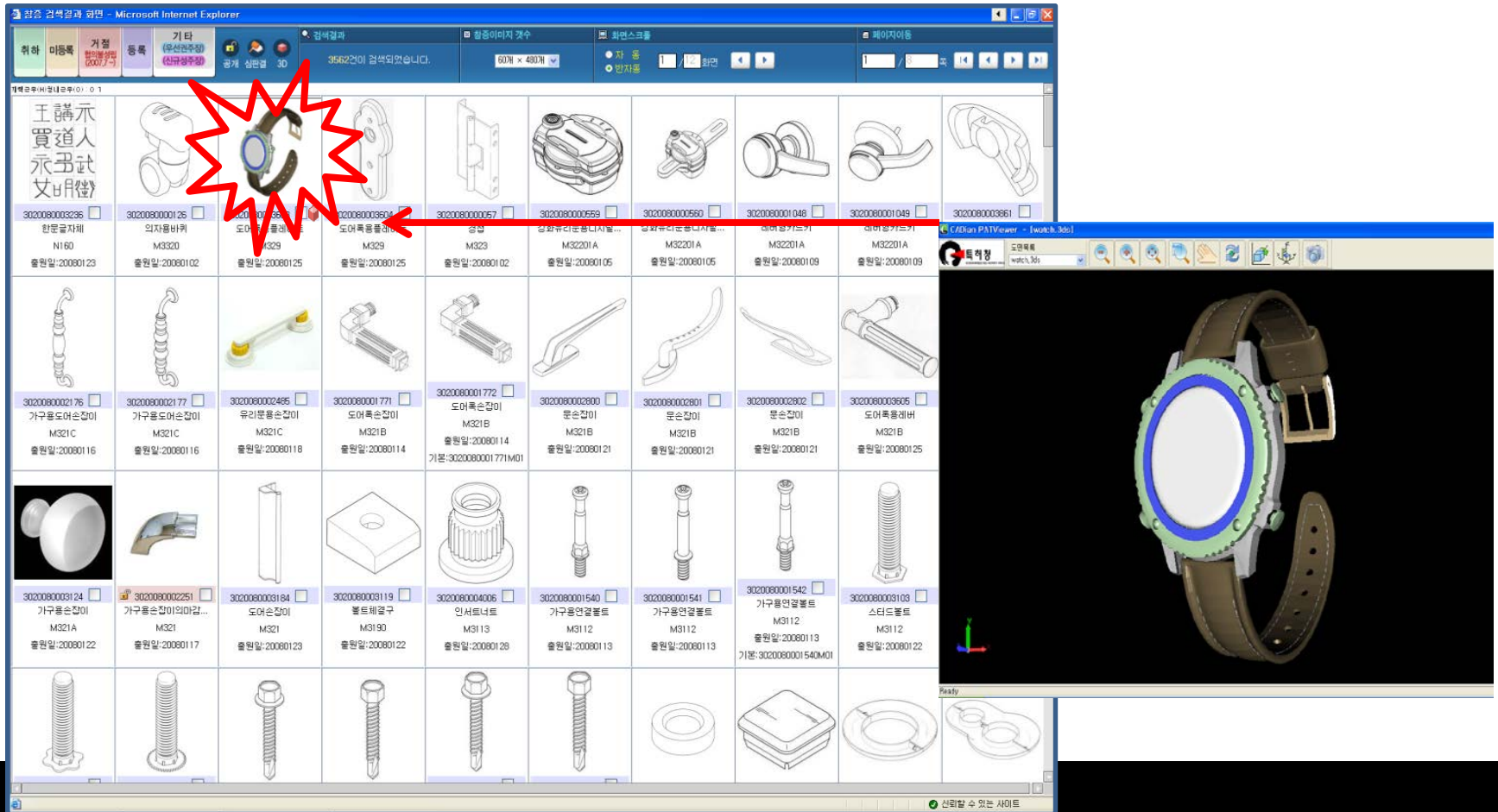
✚ Gazette including 3D
reproduction possible
using ezPDF viewer
applying the 3D PDF
technology

II.   Development

- Development of 3-D Modeling System

Phase 1 (2009.10~12)	Preparation of application	Submission of application	Formality checks	Classifying of designs	Substantial examination

Phase 2 (2010.1~2)	Gazette publication	Improving search system	Improving trial system
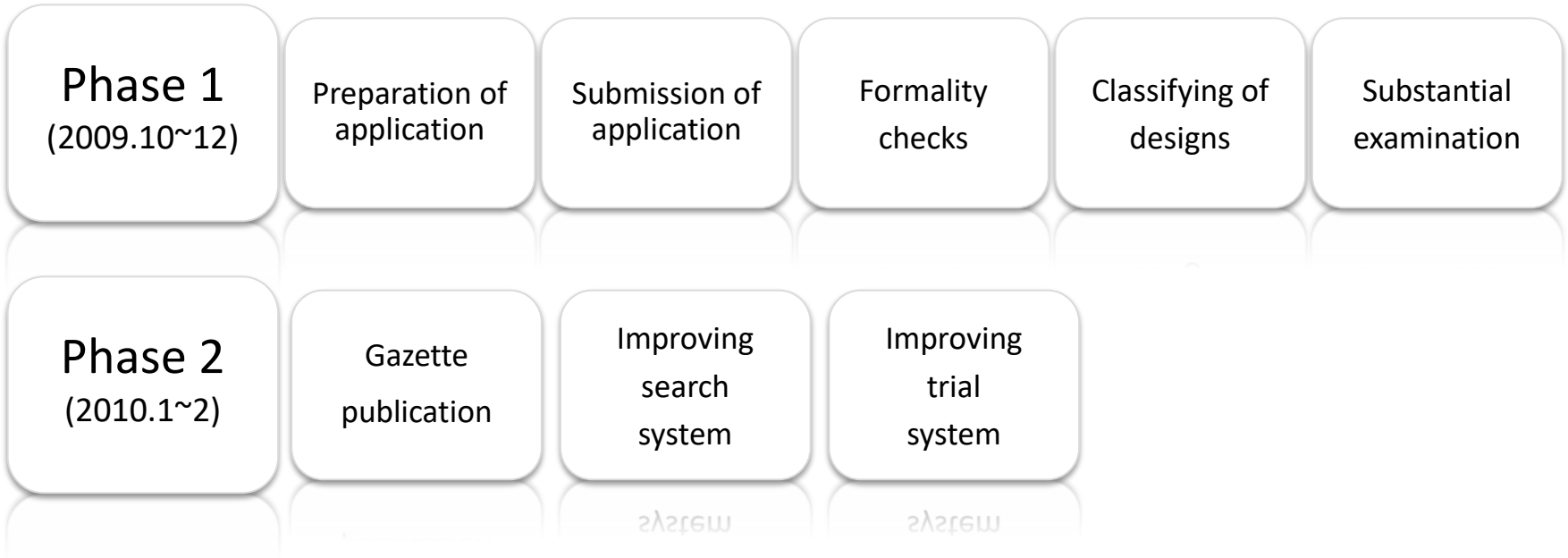
2. Partial Revision of the Enforcement Regulations

Acceptance of 3-D modeling files

KIPO accepts the submission of 3-D modeling file formats, including 3DS, DWG, DWF , IGES, and3DM(since2013) as drawings. The aim of this is to alleviate the inconvenience of having to prepare extra drawings solely for filing the application.

Changing regulations for the preparation of applications

This allows for the filing of a 3-D design application with at least one drawing which clearly specifies the creative content and overall shape of the design, it is no longer obligatory to submit 2-D drawings.

3. User Training & PR

# III.	Statistics

Design filing concerning 3D computer modeling

(Number of designs)

Applications with 3D Modeling Files

Year	Value
2014	2,442
2015	3,292
2016	3,302
2017	3,356
2018	3,765

Available 3D programs

☑ Auto CAD   ☑ Rhino

☑ 3D Studio MAX   ☑ Pro/Engineer
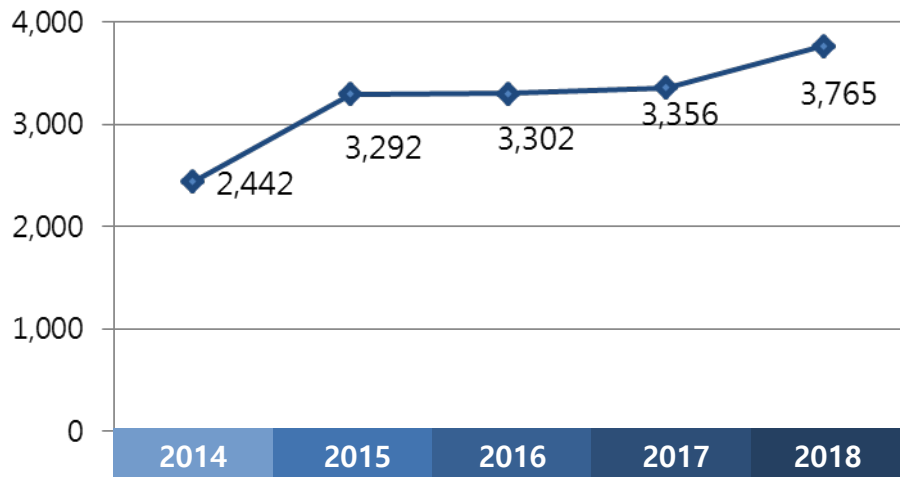
☑ Alias studio   ☑ Solidworks

- File format **'dwg', 'dwf' '3ds'** supporting over 70% of design file used in Korean design industry.

- **E-filing system Supporting 3ds**(3D studio)**, dwg**(2D/3D CAD Drawing) **, igs(iges)** (Initial Graphics Exchange Specification)**, dwf**(Drawing web format)**, 3dm**(3 Dimensinal modeling) file format

|	3DS	DWG	DWF	IGES	3DM	Total
2011	713	416	81	378	-	1,588
2012	1,485	315	5	588	-	2,393
2013	868	182	31	626	239	1,946
2014	831	364	36	858	304	2,393
2015	648	545	13	1,470	534	3,210
2016	556	409	11	1,275	961	3,212
2017	489	377	18	1,348	1,124	3,356
2018	494	402	7	1,690	1,172	3,765

IV. Way to go

1. **Compatibility**

2. **Amendment Issue**

3. **Limitation of the Size of File**

4. **Needs from Industry**

5. **Priority**

1. Compatibility
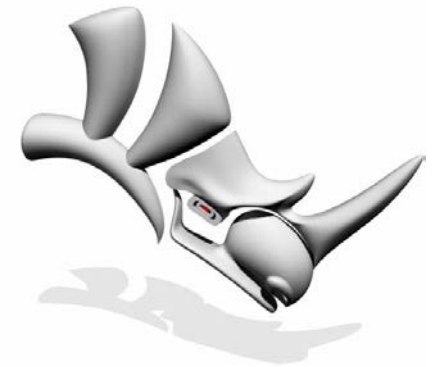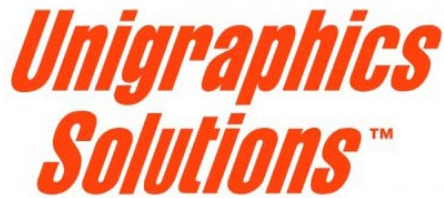
2. Amendment of Documents

initial		amending
3D	🚫 →	**2D**
2D	🚫 →	**3D**
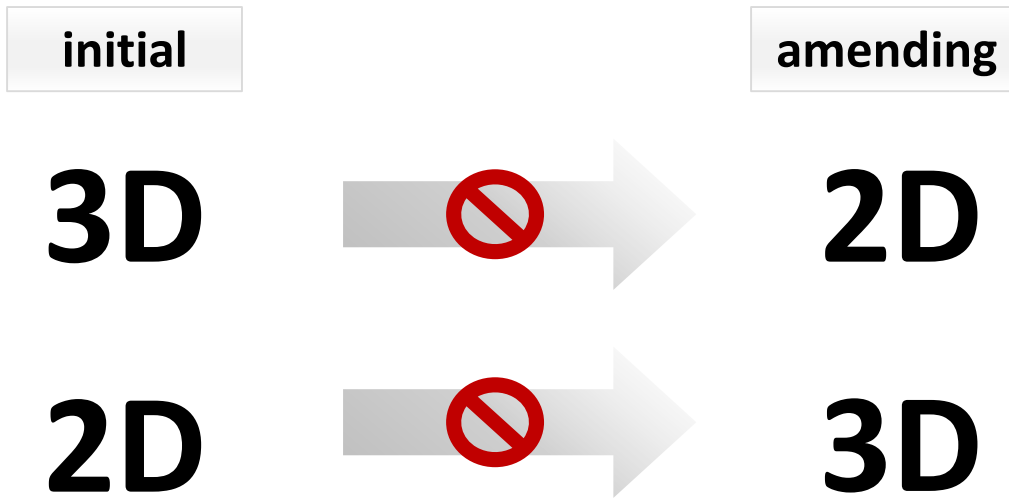
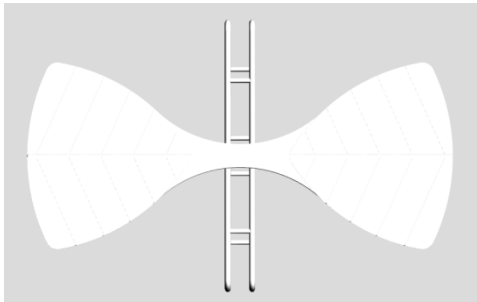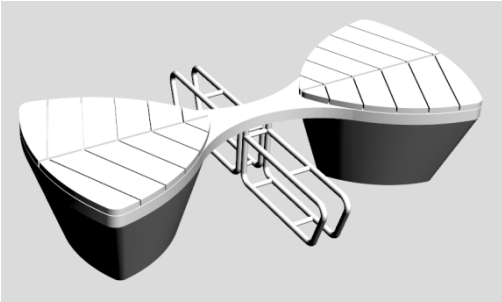**3. Limitation of the Size of file**

4. Needs from industry

5. Priority

This is to certify that the application annexed to this document contains a two-dimensional image derived from the original three-dimensional image in accordance with the procedures outlined in Appendix 1 of the Enforcement Decree of the Design Act. The original application records can be found on the Web site of the Korean Intellectual Property Office.

"2D"

Thank you for your attention!

If you have any questions and inquiries, please do not hesitate to contact us.

[Policy, Legal system] eunmi.sohn@korea.kr
[IT system] jumi.lee@korea.kr