

3D E-filing System in KIPO



Korean Intellectual
Property Office

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- I. Background
- II. System Development
- III. Statistics
- IV. Way to go



I. Background

I. Background

- Context of Industrial Design Practice



Image courtesy: carbodydesign.com

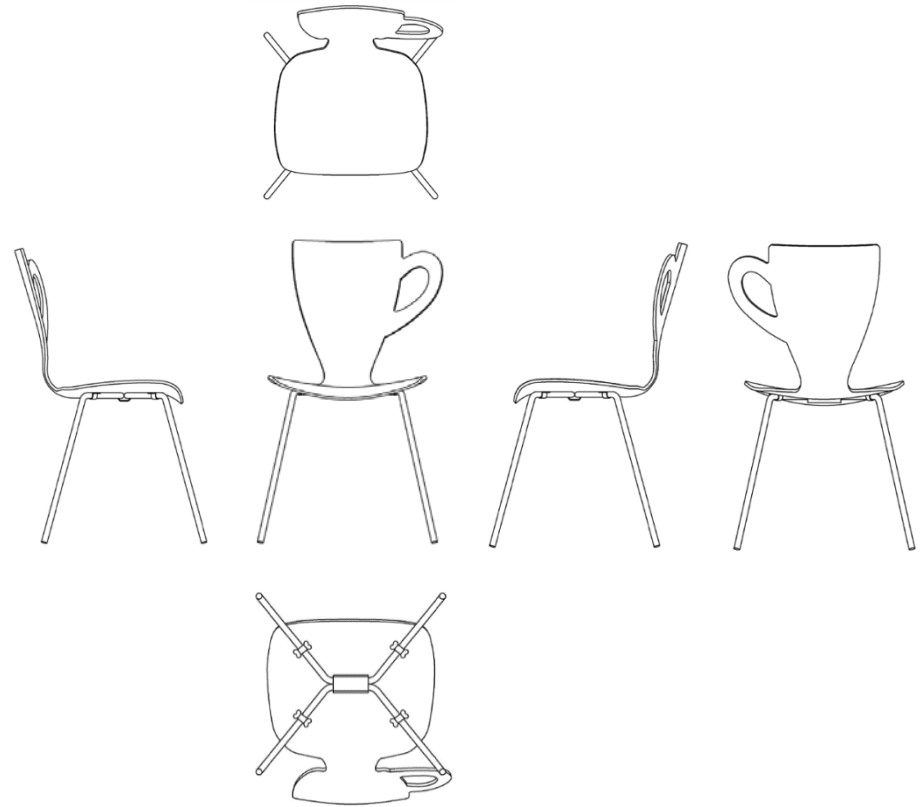


I. Background

- Drawing Requirement of Design Filing



Image courtesy: Kwon, sunhan



- Benefits of 3D format application



“from filing to disclosure, digitally and seamlessly”


“convenient, efficient and user-friendly”

I. Background

Benefits of 3D CAD format application



등록디자인 30-0652036

	<p>(19) 대한민국특허청(KR)</p> <p>(12) 등록디자인공보(S)</p>	<p>(45) 공고일자 2012년07월20일</p> <p>(11) 등록번호 30-0652036</p> <p>(24) 등록일자 2012년07월06일</p>
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(52) 분류	B3-431C무심사등록
(51) 국제분류	11-01
(21) 출원번호	30-2012-0012527
(22) 출원일자	2012년03월16일
(73) 디자인권자	정인철
	경기도 남양주시 진건읍 진건오남로100 1동710호 (한신아파트)
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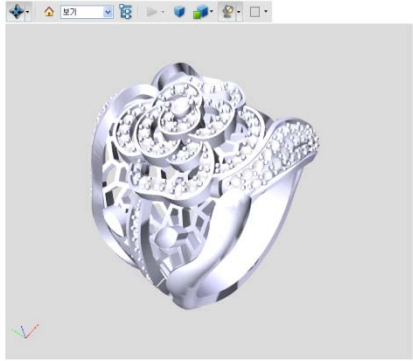
담당심사관 : 이명숙

(54) 명칭 반지

디자인도면

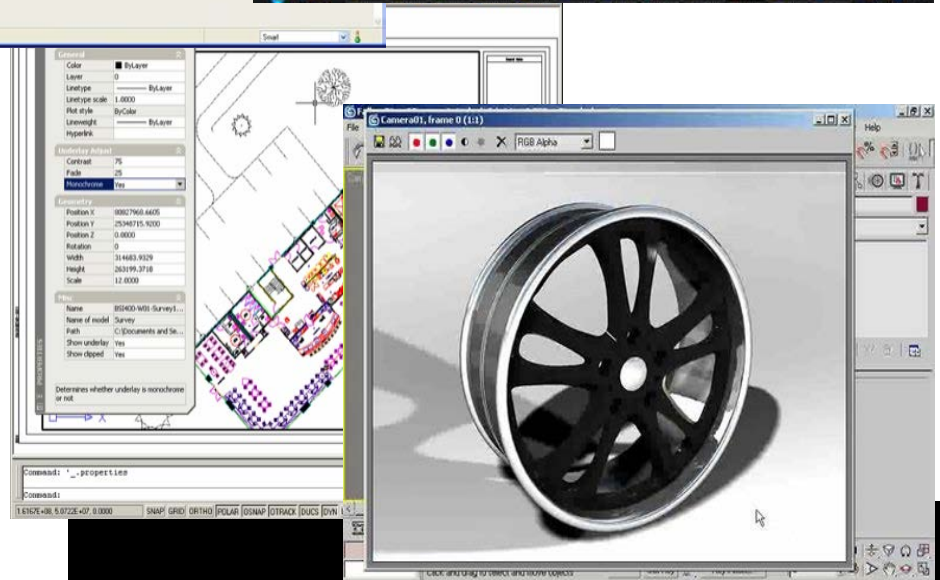
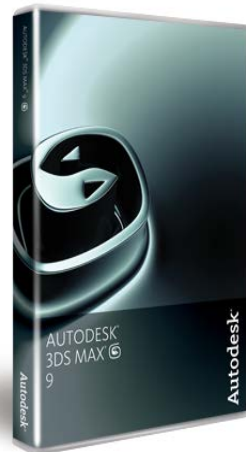
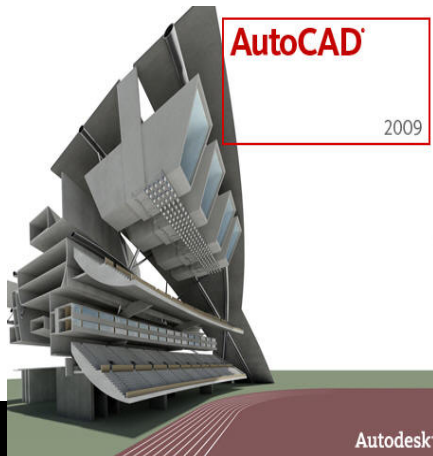
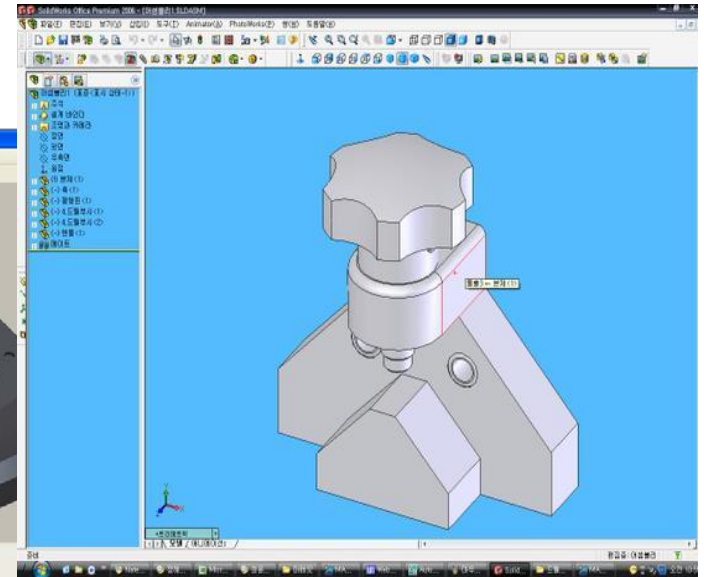
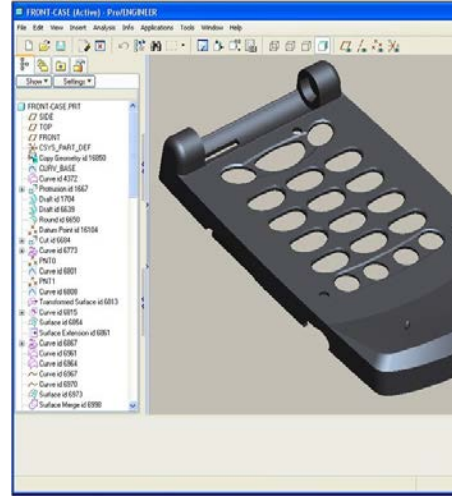
디자인의 대상이 되는 물품

반지



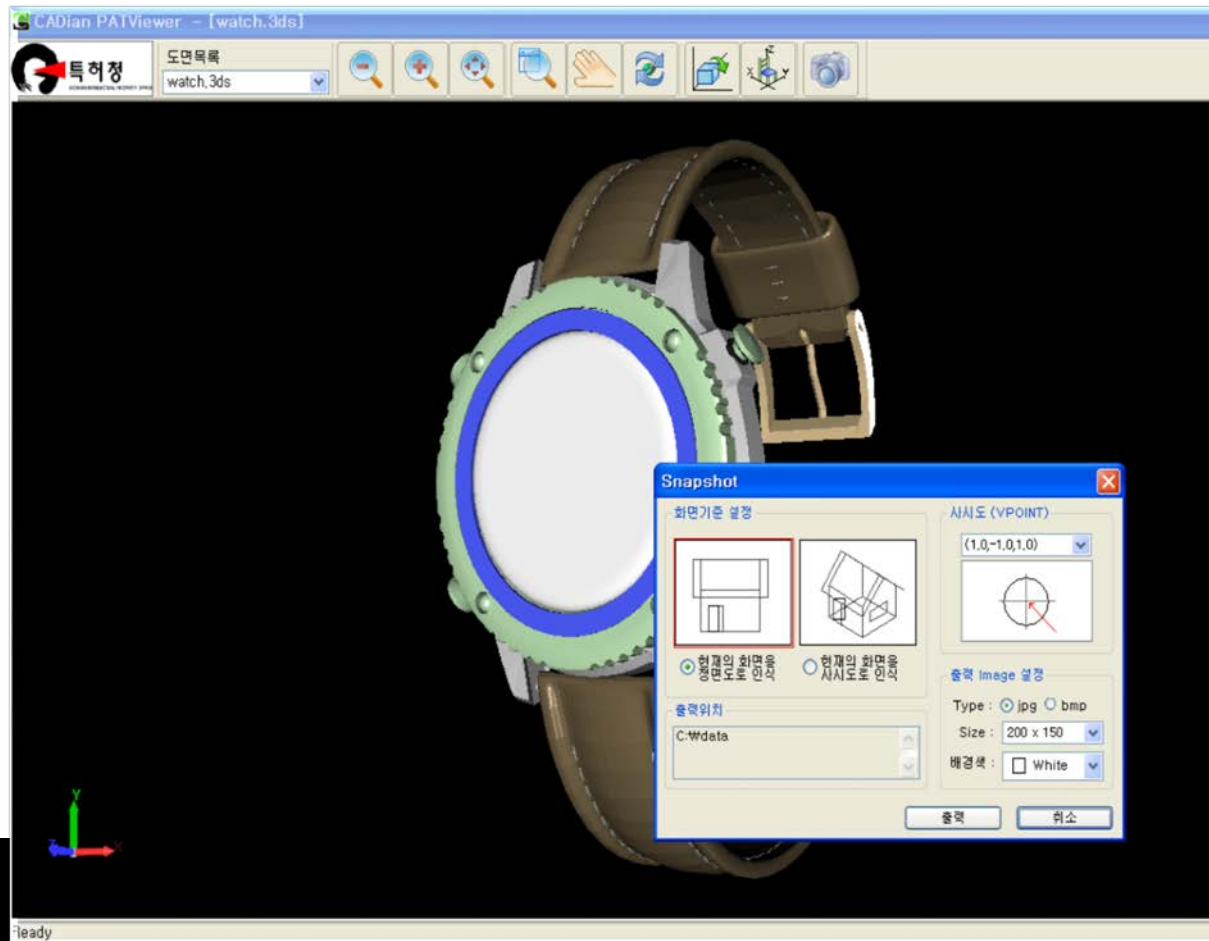
1. Popular 3D Modeling Software programs for product design

- 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



2. Substantive examination of 3D format application

- 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.



3. 2D drawing Auto-extraction & Snapshot for searching of prior design

- extract 2D reproduction from 3d-file with snapshot viewpoint assigned.

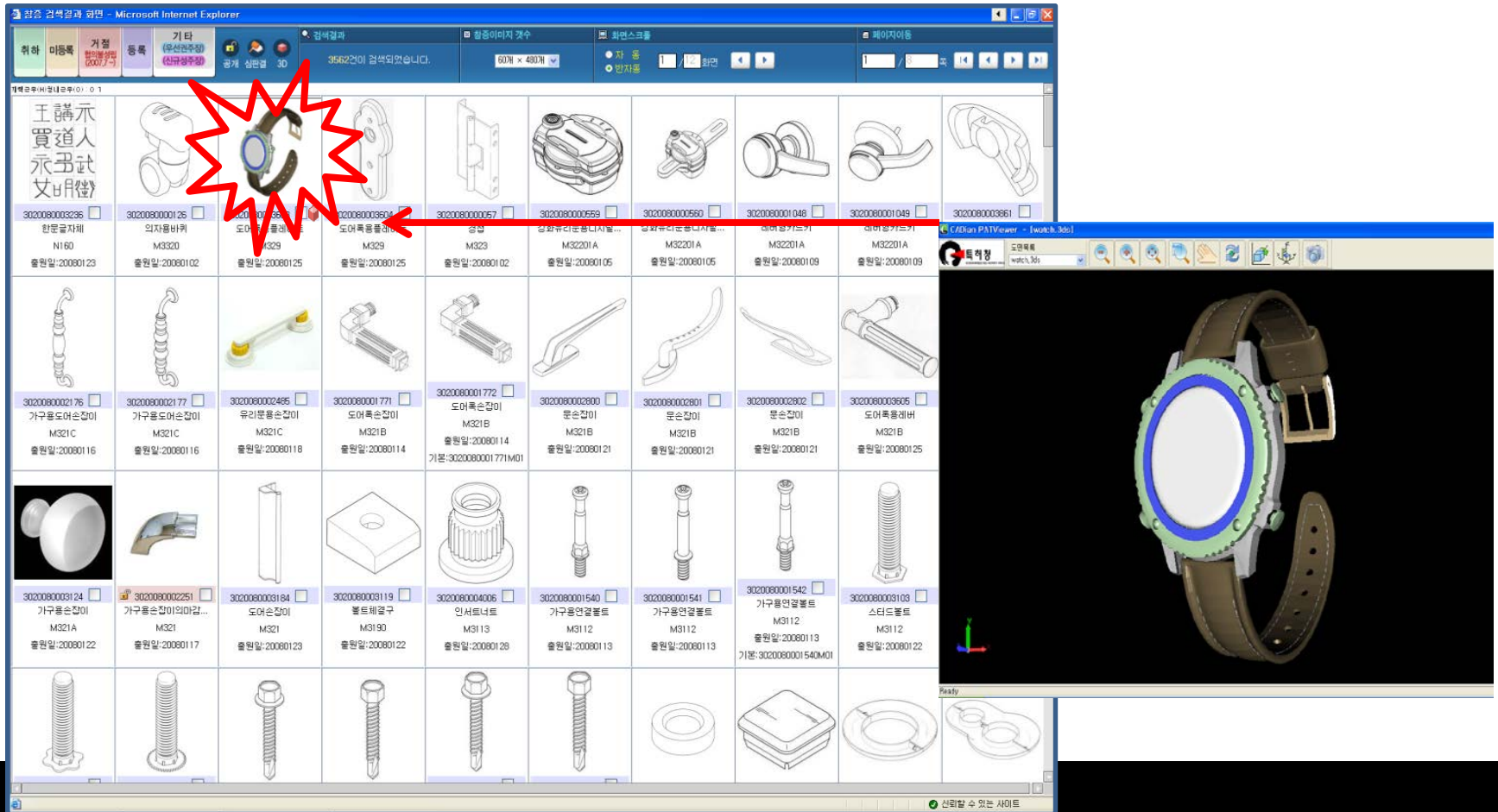
The screenshot shows a web application interface for patent search. It includes a table of patent entries and a grid of 10 thumbnail images representing different viewpoints of a watch. The thumbnails are labeled '도면 1' through '도면 10'. The bottom row of thumbnails is highlighted with a red border.

순번	출원번호	여권일자
1	302050020151	20090118
2	302000043258	20090730
3	30203900000395	20091223
4	3020060000041	20091224
5	30203900000396	

출원 사항					
출원번호(출원일자)	302050020151 (20090118)	상사구분	심사	원출원	
등록번호		등록일자		우선심사	
심사진행상태	거절예고	담당심사관	심종수	비밀디자인	신청없음
소급구분		소급상태		최종소급일	2009.06.16
출원공개신청		출원공개일자		디자인 수	1
출원인	인텔렉츄얼 솔루션즈 인		대리인	박경재	

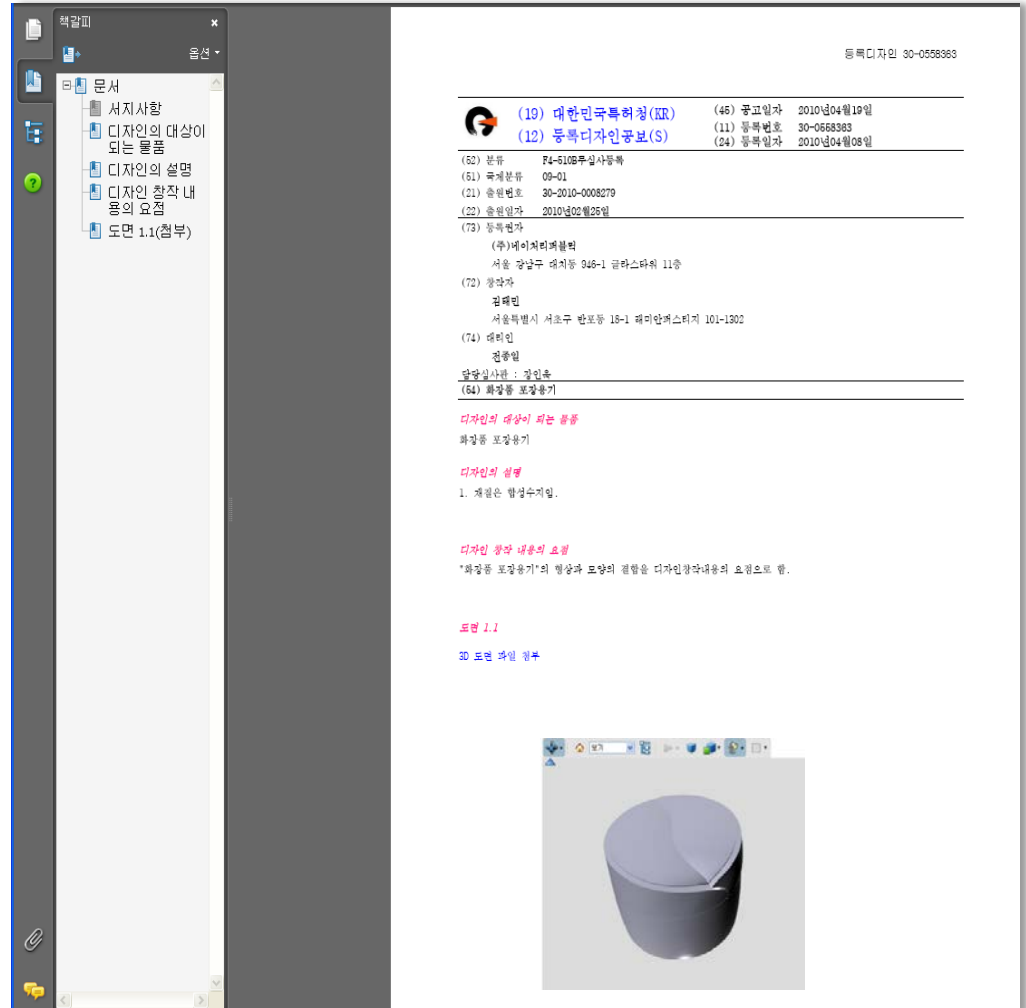
순번	첨삭번호	파일명
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2	112005070867033	des00002.jpg
3	112005070867033	des00003.jpg
4	112005070867033	des00004.jpg
5	112005070867033	des00005.jpg
6	112005070867033	des00006.jpg
7	112005070867033	des00007.jpg
8	112005070867033	des00008.jpg
9	112005070867033	des00009.jpg
10	112005070867033	des00010.jpg

- After registration, Uploading the 2D reproduction(perspective, 6views) data to the search DB



6. 3D PDF Gazette

- + Gazette including 3D reproduction possible using **ezPDF viewer** applying the 3D PDF technology




The image shows a PDF viewer interface with a table of contents on the left and a 3D model of a cup on the right. The table of contents includes:

- 서지사항
- 디자인의 대상이 되는 물품
- 디자인의 설명
- 디자인 창작 내용의 요점
- 도면 1.1(첨부)

The 3D model is a blue cup with a lid, shown in a perspective view.

등록디자인 30-0568363

	(19) 대한민국특허청(KR)	(46) 공고일자	2010년04월19일
	(12) 등록디자인공보(S)	(11) 등록번호	30-0668363
		(24) 등록일자	2010년04월08일

(82) 분류 F4-5108투입자동복
(61) 국제분류 09-01
(21) 출원번호 30-2010-0008279
(22) 출원일자 2010년02월25일
(73) 등록원가
(주)에이저리퍼블릭
서울 강남구 대치동 046-1 글라스타워 11층
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권태민
서울특별시 서초구 반포동 18-1 페미안베스티지 101-1302
(74) 대리인
진종일
담당실사관 : 김인호
(54) 회장품 포장용기

디자인의 대상이 되는 물품
회장품 포장용기

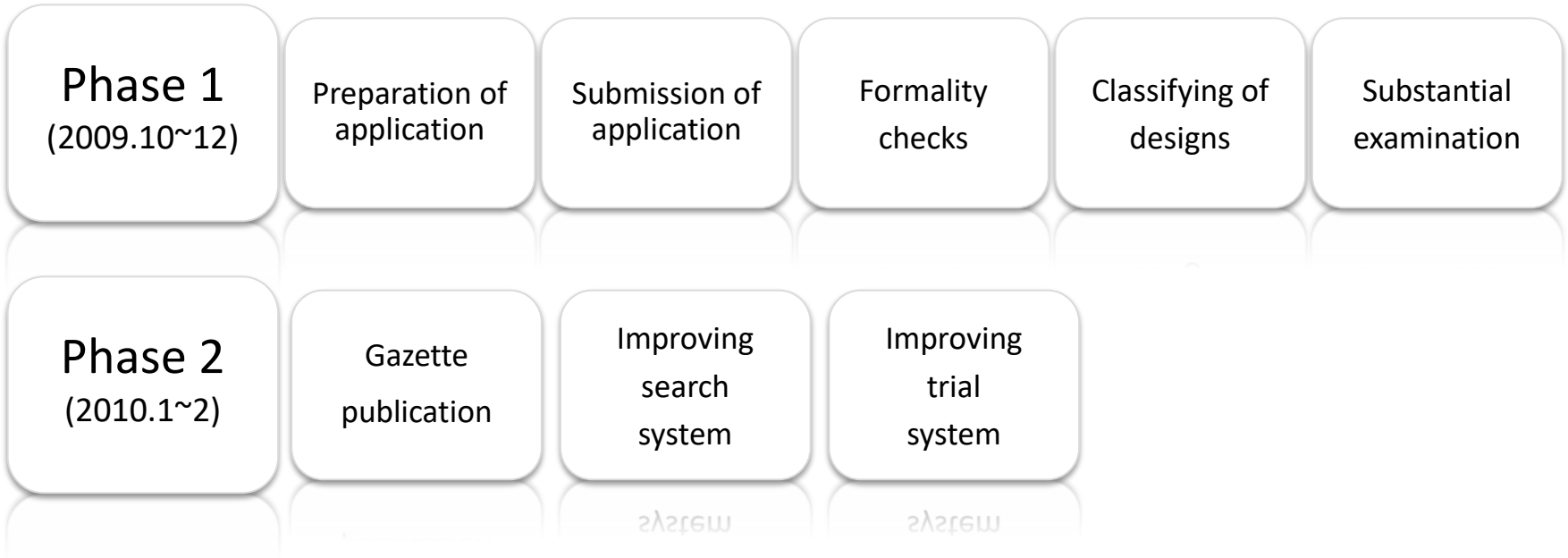
디자인의 설명
1. 재질은 합성수지임.

디자인 창작 내용의 요점
"회장품 포장용기"의 형상과 모양의 결합을 디자인장카내용의 요점으르 함.

도면 1.1
3D 도면 라인 첨부

II. Development

- Development of 3-D Modeling 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, and 3DM (since 2013) 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.

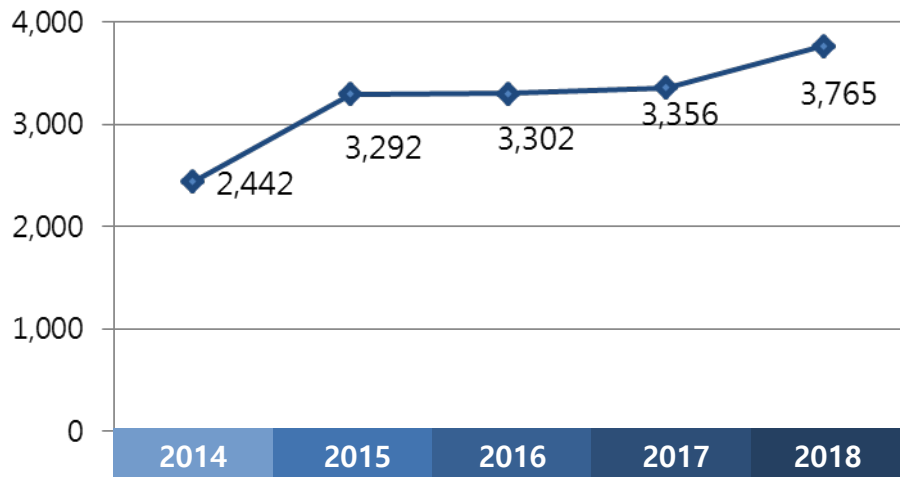
3. User Training & PR

III. Statistics

Design filing concerning 3D computer modeling

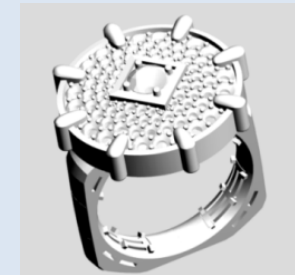
(Number of designs)

Applications with 3D Modeling Files



Available 3D programs

- Auto CAD
- 3D Studio MAX
- Alias studio
- Rhino
- Pro/Engineer
- Solidworks



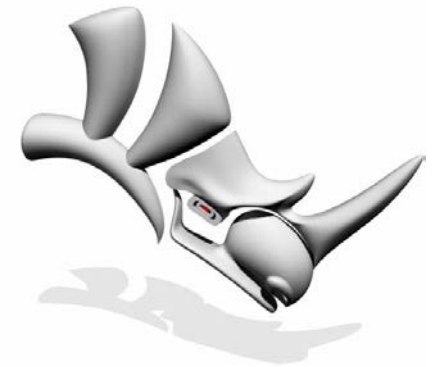
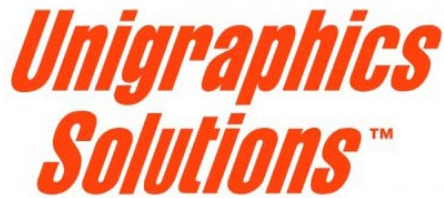
- File format '**dwg**', '**dwf**' '**3ds**' supporting over 70% of design file used in Korean design industry.
- E-filing system Supporting 3ds**(3D studio), **dwg**(2D/3D CAD Drawing) , **igs(iges)** (Initial Graphics Exchange Specification), **dwf**(Drawing web format), **3dm**(3 Dimensional modeling) 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

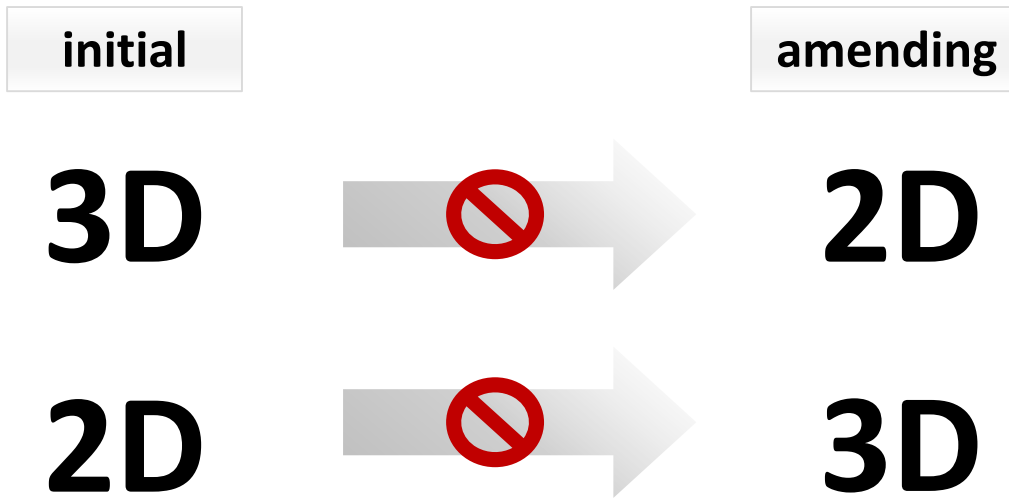
IV. Way to go

- 1. Compatibility**
- 2. Amendment Issue**
- 3. Limitation of the Size of File**
- 4. Needs from Industry**
- 5. Priority**

1. Compatibility



2. Amendment of Documents

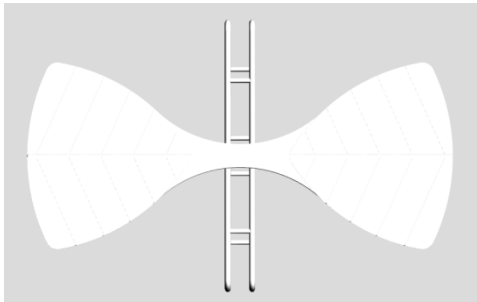
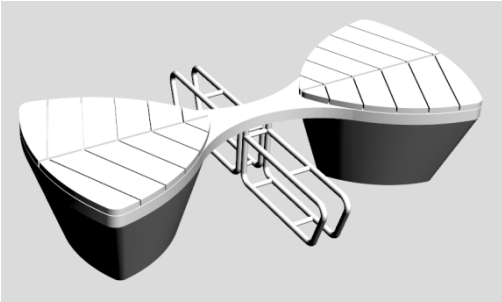


3. Limitation of the Size of file

4. Needs from industry

IV. Way to go

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.

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