

# 3D E-filing System in KIPO



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# **I. Background**

# I. Background

## - Context of Industrial Design Practice

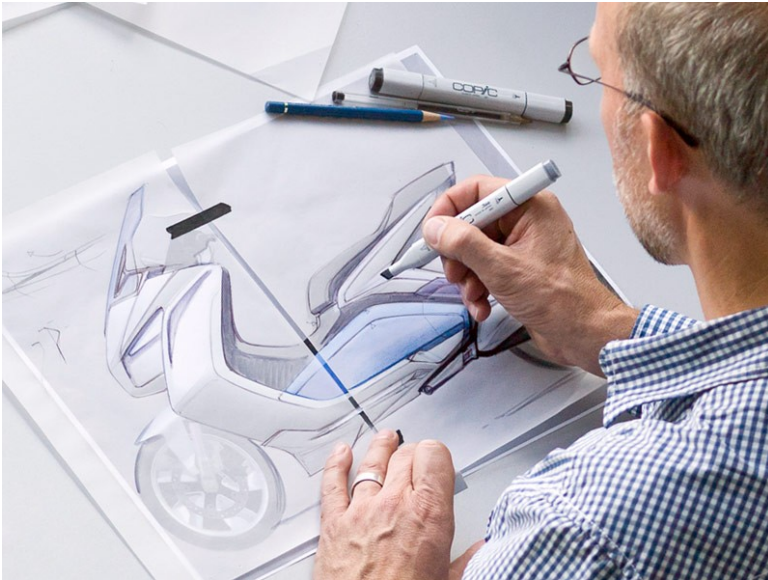
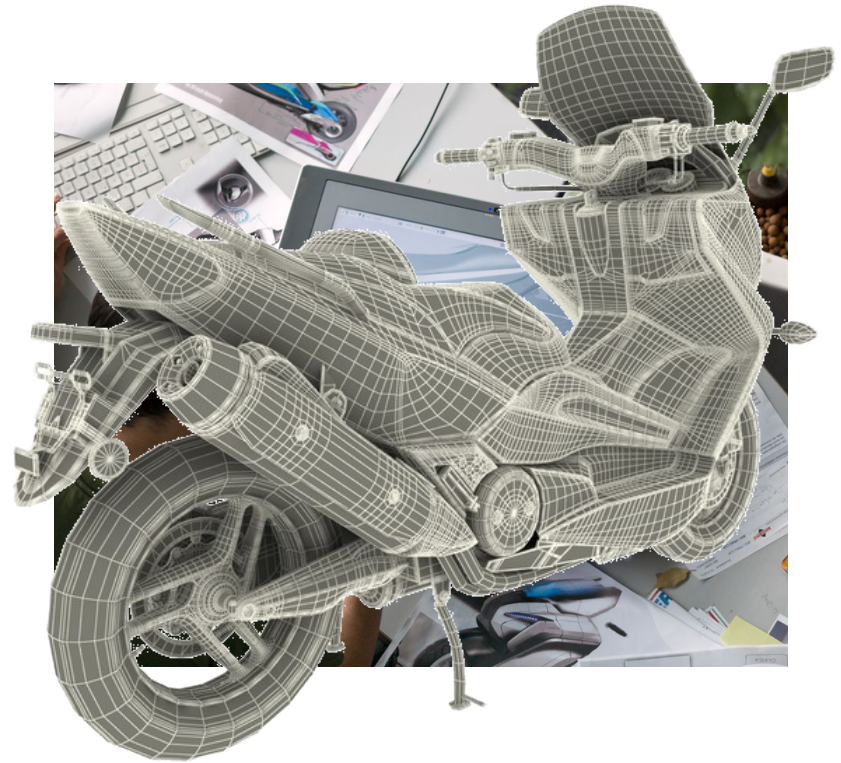


Image courtesy: [carbodydesign.com](http://carbodydesign.com)



# I. Background

## - Context of Industrial Design Practice

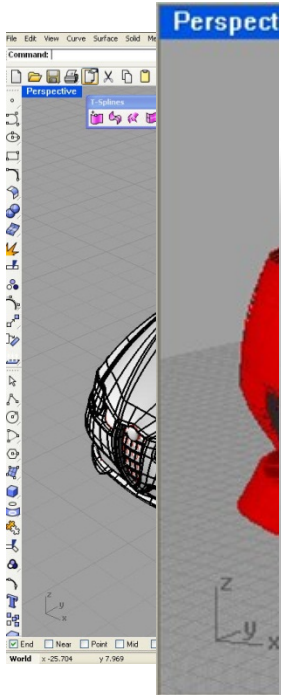


Image courtesy: netcarshow.net

# I. Background

## - Drawing Requirement of Design Filing



Image courtesy: Kwon, sunhan



## I. Background

### - Benefits of 3D CAD format application

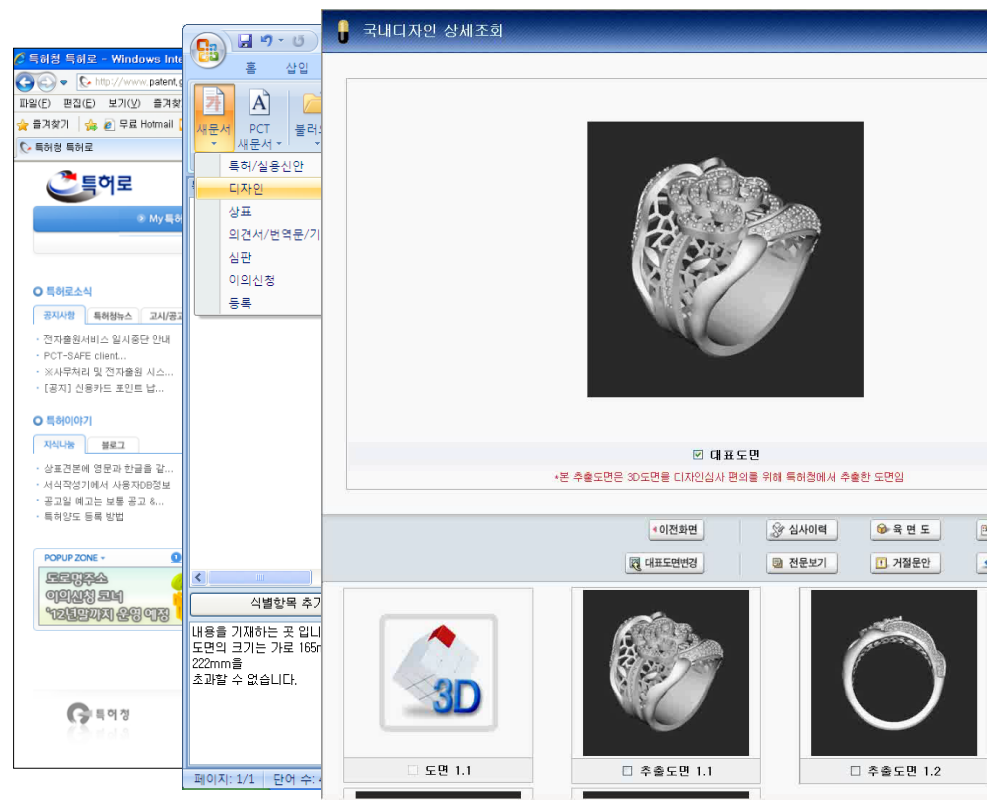


*“from filing to disclosure, digitally and seamlessly”*


*“convenient, efficient and user-friendly”*

I. Background

3. Benefits of 3D CAD format application



등록디자인 30-0652036

	(19) 대한민국특허청(KR)	(45) 공고일자	2012년07월20일
	(12) 등록디자인공보(S)	(11) 등록번호	30-0652036
		(24) 등록일자	2012년07월06일

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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)

(72) 창작자

정인철

경기도 남양주시 진건읍 진건오남로100 1동710호 (한신아파트)

담당심사관 : 이명숙

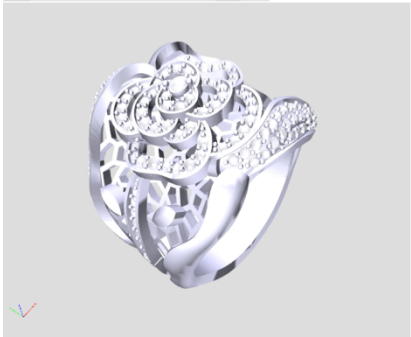
(54) 명칭

반지

디자인도면

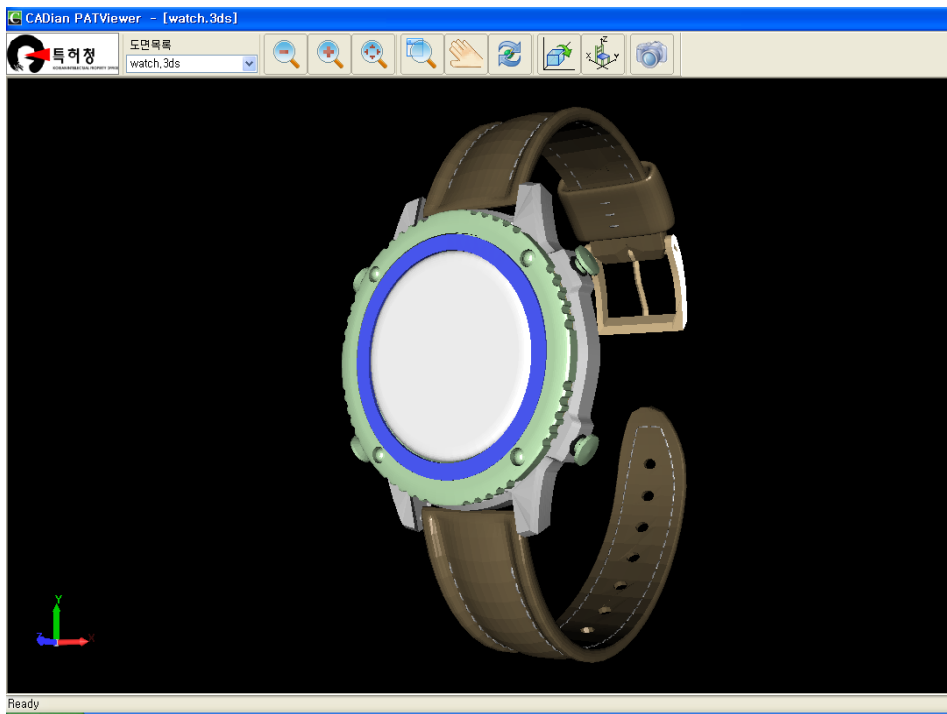
디자인의 대상이 되는 물품

반지





### 3. Benefits of 3D CAD format application

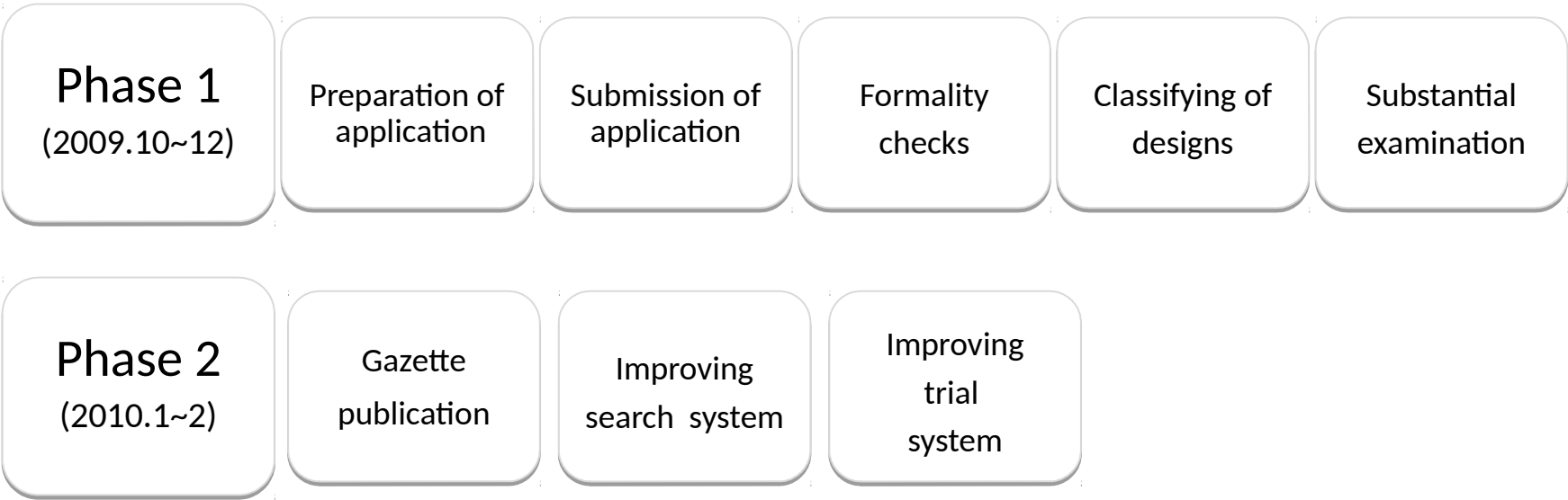


### I. Background

## **II. System Development**

## II. System Development

### - Development of 3-D Modeling System



**Budget for system development: total 523 million won (28,500,000 RUB)**

- Phase 1: 100 million won (approx. 5,000,000 RUB)
- Phase 2: 423 million won (approx. 23,500,000 RUB)

## **II. System Development**

### **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 and IGES, 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**

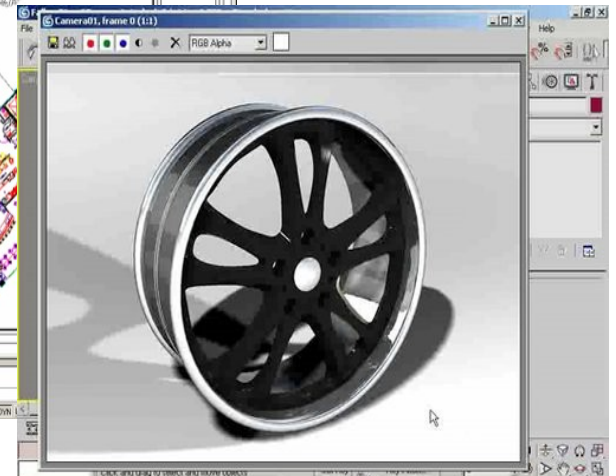
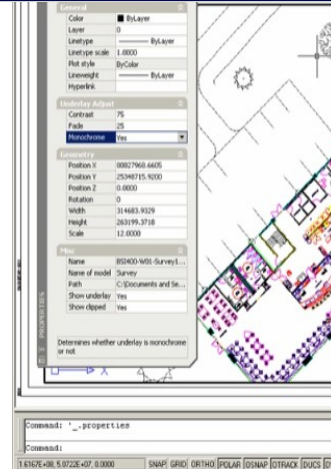
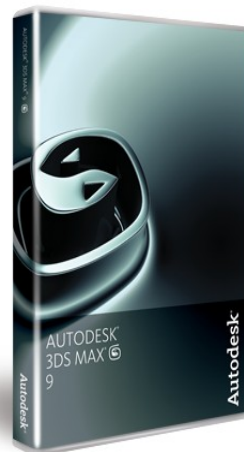
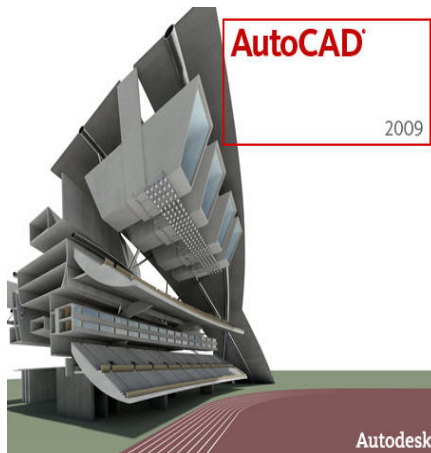
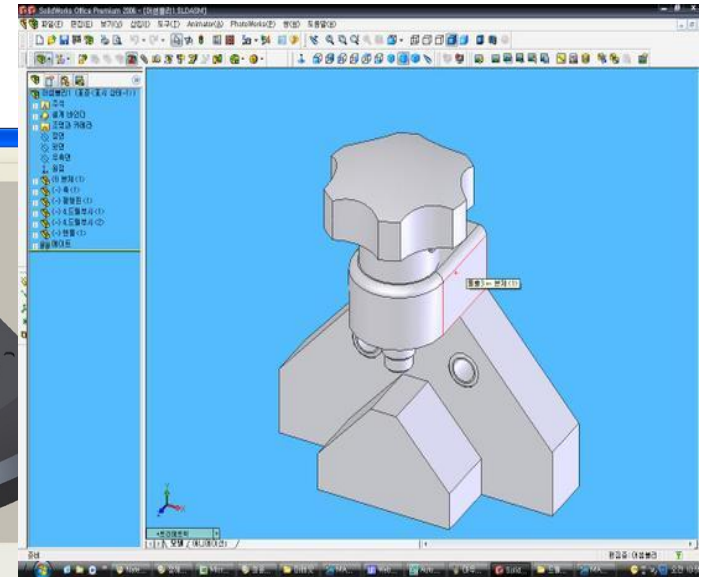
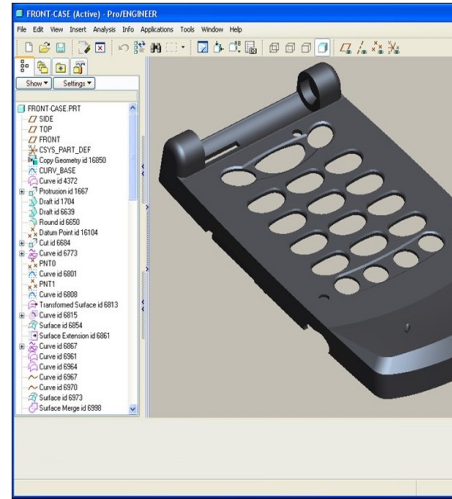
### **III. Statistics**

## 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



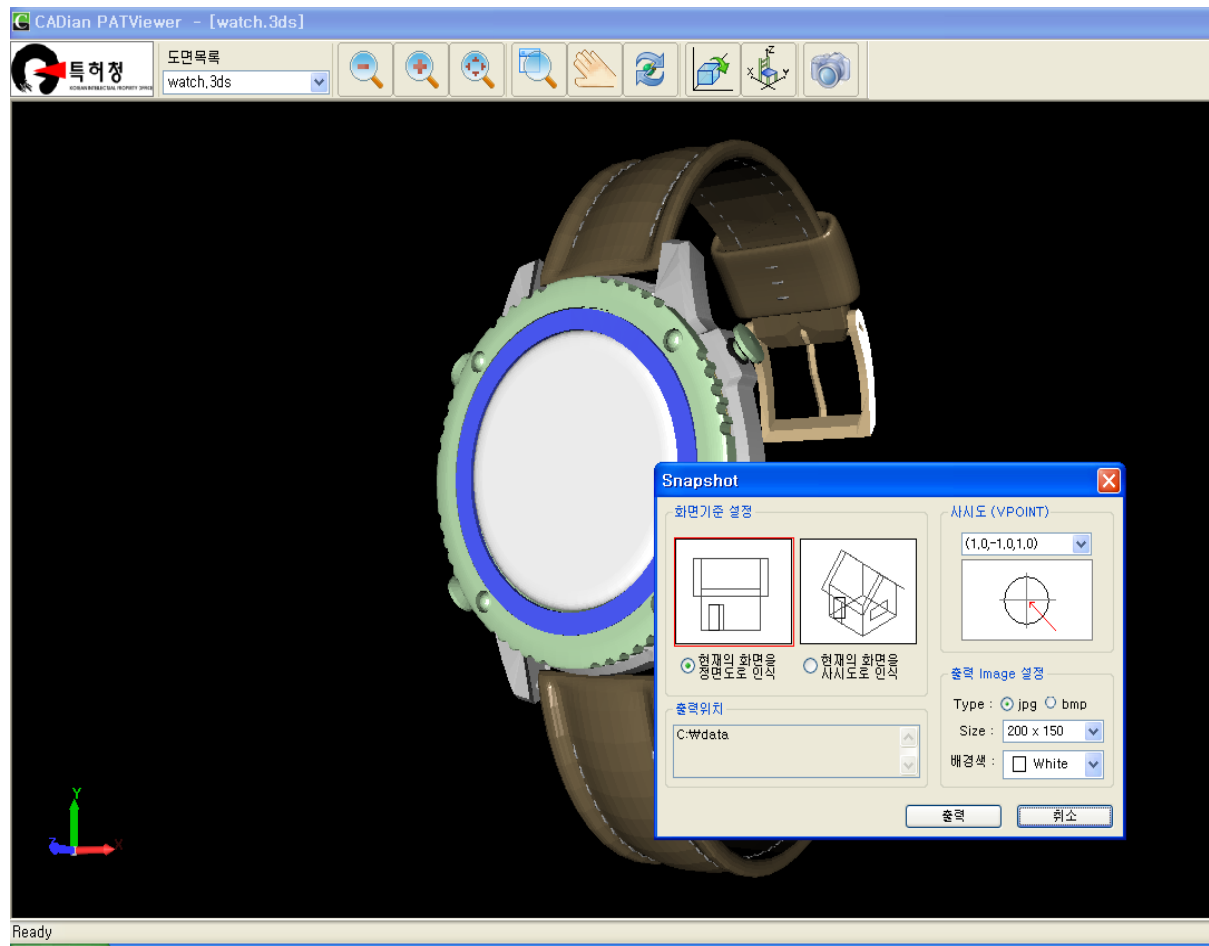
## 2. Applicable file format

- 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) , **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

### 3. Substantive examination

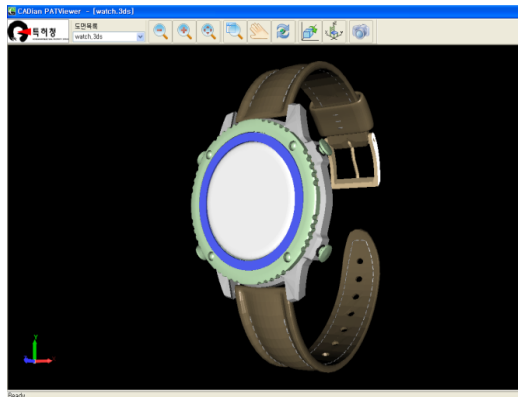
- identify the characteristic figures with enlarge, reduce, move, and rotate 3D image through **CADian viewer**
- The design Examination process is the same as the usual design Examination.





## 4. 2D drawing Auto-extraction & Snapshot

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



3D 도면추출 메인브라우저 - Microsoft Internet Explorer

디자인 3D도면 추출

3D추출대상 출원리스트

순번	출원번호	이관일자
1	3020050020151	20060118
2	3020080043258	20090730
3	3020090000035	20091223
4	3020090000041	20091224
5	3020090000036	

출원사항

출원번호(출원일자)	심사구분	심사	원출원
3020050020151 (20050616)	등록일자	심사	우선심사
심사전행상태	거절예고	담당심사관	심결수
소급구분		소급상태	비밀디자인
출원공개신청		출원공개일자	최종소급일
출원인	인발특허출원 출원선조인	대리인	디자인 수
			1
			박경재

보기 최후확인

3D추출대상 이관

순번	전수번호	파일명
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2	112005070897033	des00002.jpg
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7	112005070897033	des00007.jpg
8	112005070897033	des00008.jpg
9	112005070897033	des00009.jpg
10	112005070897033	des00010.jpg

도면 1 도면 2 도면 3

도면 1: 3D 모델의 정면 뷰

도면 2: 3D 모델의 측면 뷰

도면 3: 3D 모델의 상면 뷰

도면 4: 3D 모델의 하면 뷰

도면 5: 3D 모델의 등면 뷰

도면 6: 3D 모델의 좌측면 뷰

도면 7: 3D 모델의 우측면 뷰

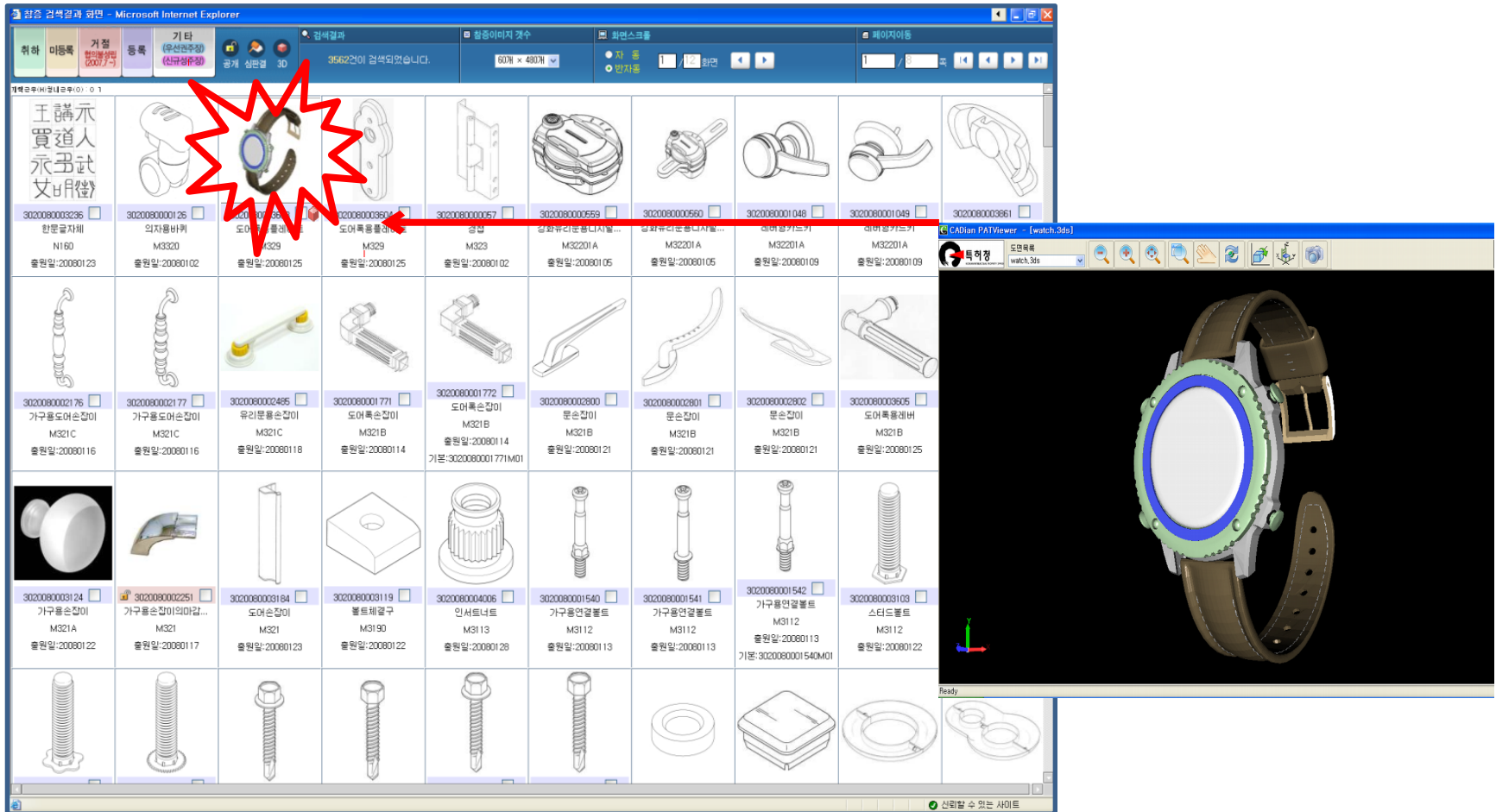
도면 8: 3D 모델의 정면 뷰 (다른 각도)

도면 9: 3D 모델의 측면 뷰 (다른 각도)

도면 10: 3D 모델의 상면 뷰 (다른 각도)

## 5. Search system

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



## 6. 3D PDF Gazette

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

해결책

문서

서지 사항


디자인의 대상이 되는 물품

디자인의 설명

디자인 창작 내용의 요약

도면 1.1(첨부)

등록디자인 30-0558383



(19) 대한민국특허청(KR)

(12) 등록디자인공보(S)

(45) 공고일자 2010년04월19일

(11) 등록번호 30-0688383

(24) 등록일자 2010년04월08일

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(61) 국제분류 09-01

(21) 출원번호 30-2010-0008279

(22) 출원일자 2010년02월28일

(73) 등록원가

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(72) 창작자

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(74) 대리인

정충원

담당실사관 : 김진옥

(64) 화상품 포장용기

디자인의 대상이 되는 물품

화상품 포장용기

디자인의 설명

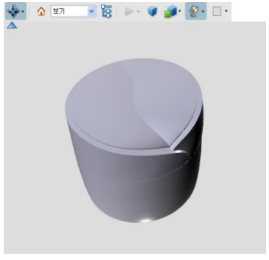
1. 제원은 첨부수지일.

디자인 창작 내용의 요약

\*화상품 포장용기\*의 형상과 모양의 결합을 디자인창작내용의 요점으로 함.

도면 1.1

3D 도면 파일 첨부

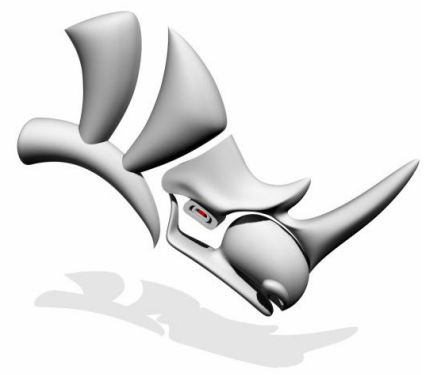


## **IV. Way to go**

- 1. Compatibility**
- 2. Amendment Issue**
- 3. Priority**

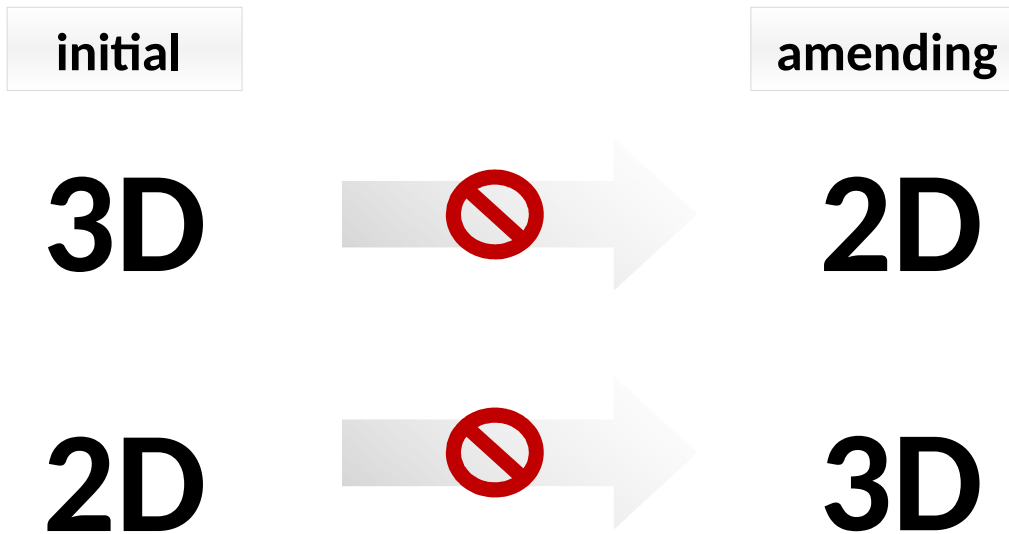
IV. Way to go

1. Compatibility



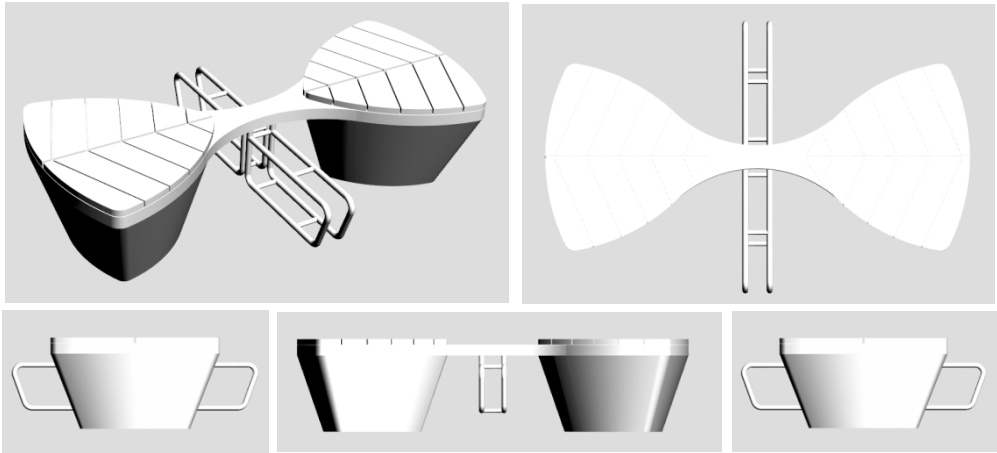
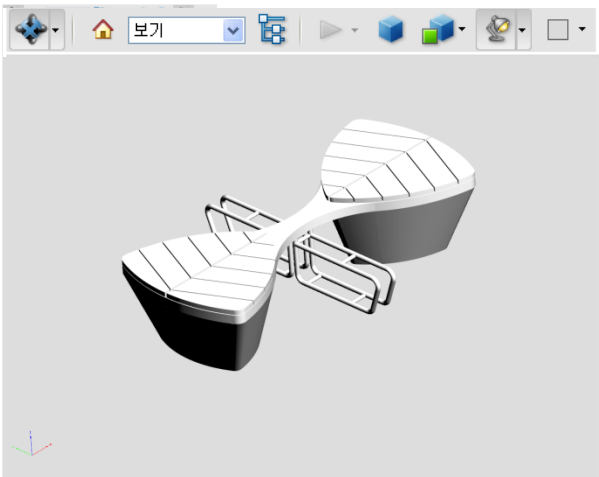
#### IV. Way to go

### 2. Amendment of Documents



IV. Way to go

3. Priority



Korean Intellectual  
Property Office



“3D”

“2D”

### 3. Priority

Issue Number : 5-5-2011-028161282

별첨 사본은 아래 출원의 원본과 동일함을 증명함.

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.

출원 번호 : 30-2010-0017177

Application Number

출원 연월일 : 2010년 04월 19일

Filing Date APR 19, 2010

출원인 : (주)네이처리퍼블릭  
Applicant(s) NATURE REPUBLIC CO., LTD.

2011년 05월 18일

특 허 청

COMMISSIONER

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Issue Date : 2011.05.18

1/1

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.