

UNITED STATES
PATENT AND TRADEMARK OFFICE



A technical drawing of a mechanical assembly, possibly a turbine or engine component, is shown in the background. The drawing is a cross-section and includes numerous numbered callouts (e.g., 28, 38, 42, 46, 54, 56, 58, 62, 64, 66, 82, 84, 86, 90) pointing to various parts of the assembly. The drawing is rendered in a light gray color, making it a subtle background element.

Drawing Objections

TC 2900

FY 2023-Q3

Note

The examples in this training have been updated since the original delivery, but the teaching points and analysis remain the same.

Learning outcomes

- Recall where to find rules and their subparts applicable to drawings objections in the MPEP
- Characterize objectionable drawing matters found in 37 CFR 1.84, 37 CFR 1.152, MPEP 1503.02 and MPEP 1504.01(b)
- Determine when to object to drawings in accordance with MPEP 1503.02
- Based on a comparison, determine if the drawings need to be objected to.

Locating Drawing Rules in the MPEP

Locating drawing rules

- There are four sections of the MPEP that cover objectionable matters pertaining to the drawings:
 1. 37 CFR 1.84 Drawings
 2. 37 CFR 1.152 Design Drawings
 3. MPEP 1503.02 Design Drawing Disclosure
 4. MPEP 608.02 Drawing Disclosure

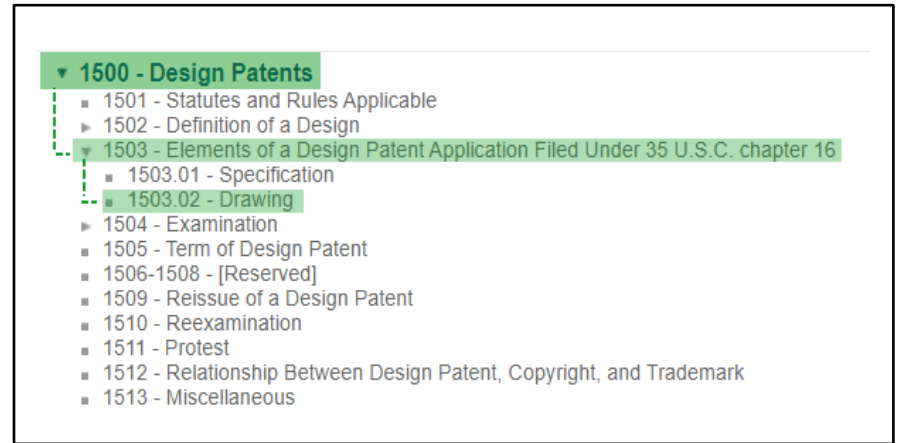
Locating drawing rules (*cont.*)

- Code of Federal Regulation (CFR) rules can be found under “Patent Rules” in the MPEP.

▶ 2900 - International Design Applications
▪ I - [Reserved]
▪ II - List of Decisions Cited
▶ L - Patent Laws
▶ R - Patent Rules
▶ T - Patent Cooperation Treaty and Regulations Under the
▶ AI - Administrative Instructions Under the PCT
▶ P - Paris Convention

Locating drawing rules (*cont.*)

- Section 1503.02 can be found in section 1500 of the MPEP.



A screenshot of the MPEP table of contents. The path to Section 1503.02 - Drawing is highlighted with green boxes and dashed lines. The path is: 1500 - Design Patents > 1503 - Elements of a Design Patent Application Filed Under 35 U.S.C. chapter 16 > 1503.02 - Drawing.

- ▼ 1500 - Design Patents
 - 1501 - Statutes and Rules Applicable
 - ▶ 1502 - Definition of a Design
 - ▼ 1503 - Elements of a Design Patent Application Filed Under 35 U.S.C. chapter 16
 - 1503.01 - Specification
 - 1503.02 - Drawing
 - ▶ 1504 - Examination
 - 1505 - Term of Design Patent
 - 1506-1508 - [Reserved]
 - 1509 - Reissue of a Design Patent
 - 1510 - Reexamination
 - 1511 - Protest
 - 1512 - Relationship Between Design Patent, Copyright, and Trademark
 - 1513 - Miscellaneous

Locating drawing rules (*cont.*)

- Section 608.02 can be found in section 600 of the MPEP.

▼ 0600 - Parts, Form, and Content of Application
▶ 601 - Content of Provisional and Nonprovisional Applications
▶ 602 - Oaths and Declarations
▶ 603 - Supplemental Oath or Declaration
▶ 604 - Substitute Statements
▶ 605 - Applicant
▶ 606 - Title of Invention
▶ 607 - Filing Fee
▼ 608 - Disclosure
▶ 608.01 - Specification
▶ 608.02 - Drawing
▶ 608.03 - Models, Exhibits, Specimens
▶ 608.04 - New Matter
▶ 608.05 - Sequence Listing, Table, or Computer Program Listing Appendix Submitted in Electronic Form
▶ 609 - Information Disclosure Statement

Locating drawing rules (*cont.*)

- **37 CFR 1.152** and **MPEP 1503.02** deal specifically with the drawing disclosure in design patent applications.
- **37 CFR 1.84** and **MPEP 608.02** deal with the drawing disclosure in general.
- In this training, we will be covering drawing rules under 37 CFR 1.84, 37 CFR 1.152, and guidance in MPEP 1503.02.

37 CFR 1.84 in Detail



37 CFR 1.84(a) and (b)

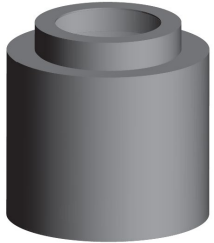
- The drawing disclosure may consist of line drawings or photographs (or computer renderings) and may be presented in either black and white or in color.
- Computer renderings are treated as either Drawings or Photographs, depending on the nature of the renderings.
- When an application includes a color drawing disclosure, the specification must include this statement.

"The patent or application file contains at least one drawing executed in color. Copies of this patent or patent application publication with color drawing(s) will be provided by the Office upon request and payment of the necessary fee."

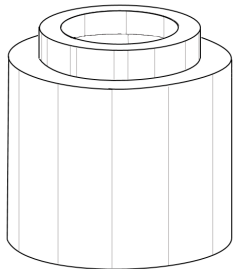
37 CFR 1.84(a) and (b) (cont.)



Photographs should be treated as such and assessed for compliance using MPEP and CFR sections for photographs.



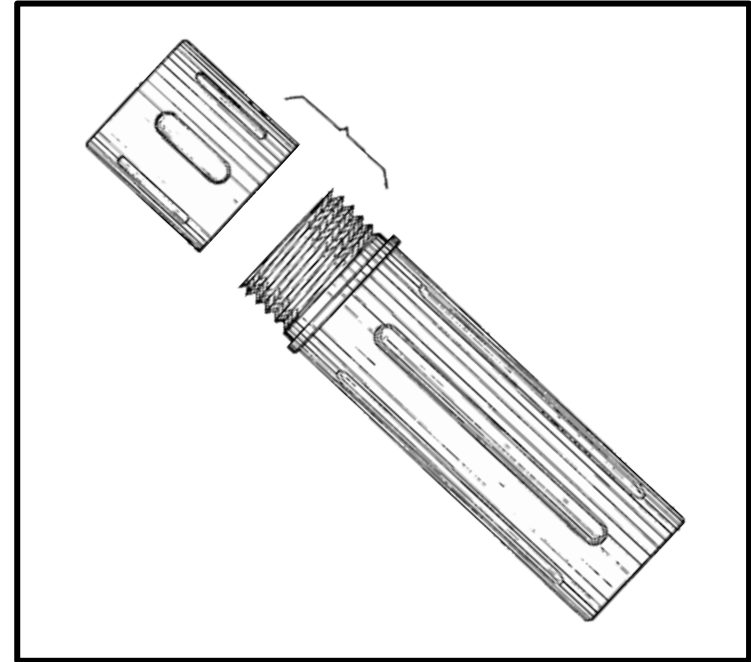
CAD renderings should be first assessed by the photorealistic quality of the rendering, then treated based on the assessment. This example would fall to a line drawing as the rendering is not photorealistic.



Wireframe renderings or line drawings should be treated as such and assessed for compliance using MPEP and CFR sections for line drawings.

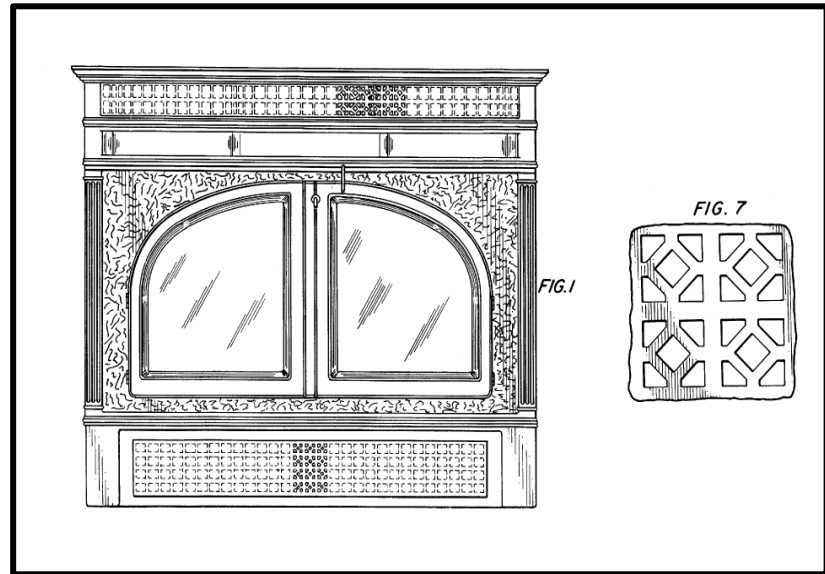
37 CFR 1.84(h)(1)

- Exploded views, with the separated parts embraced by a bracket, to show the relationship or order of assembly of various parts are permissible.
- When an exploded view is shown in a figure which is on the same sheet as another figure, the exploded view should be placed in brackets.



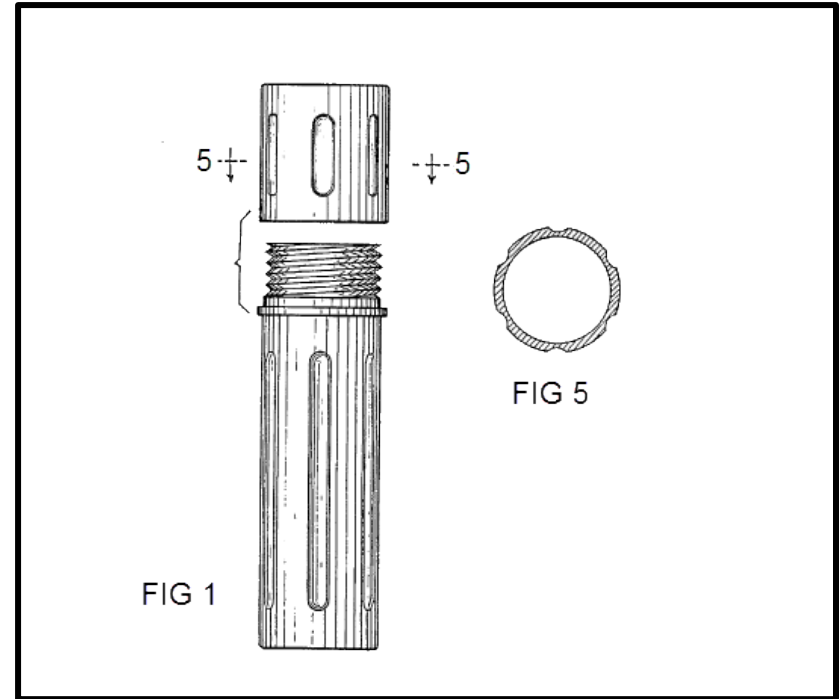
37 CFR 1.84(h)(2)

- When a portion of a view is enlarged for magnification purposes, the view and the enlarged view must each be labeled as separate views.



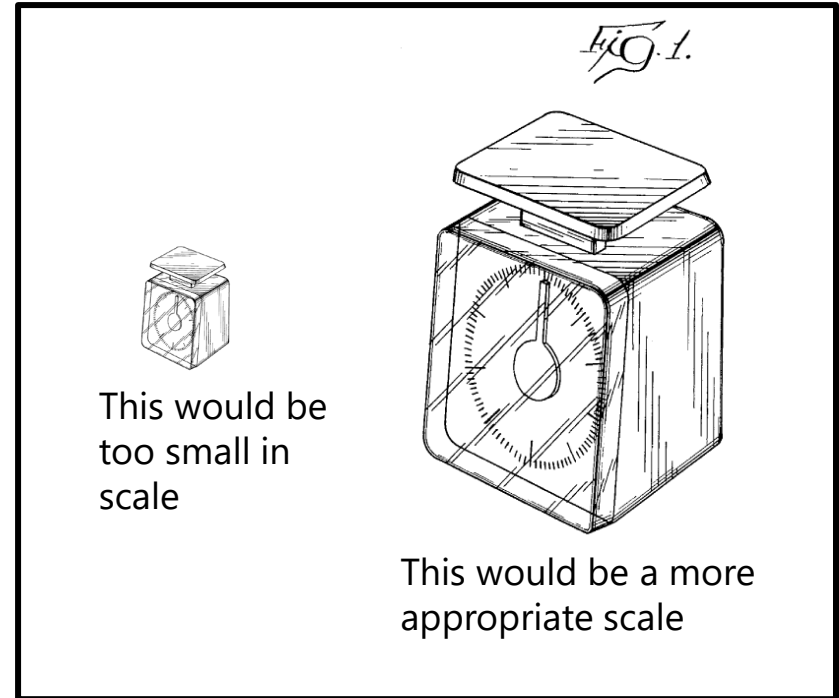
37 CFR 1.84(h)(3)

- The plane upon which a sectional view is taken should be indicated on the view from which the section is cut by a broken line.
- The ends of the broken line should be designated by Arabic or Roman numerals corresponding to the view number of the sectional view, and should have arrows to indicate the direction of sight.
- Hatching must be used to indicate section portions of an object, and must be made by regularly spaced oblique parallel lines spaced sufficiently apart to enable the lines to be distinguished without difficulty.



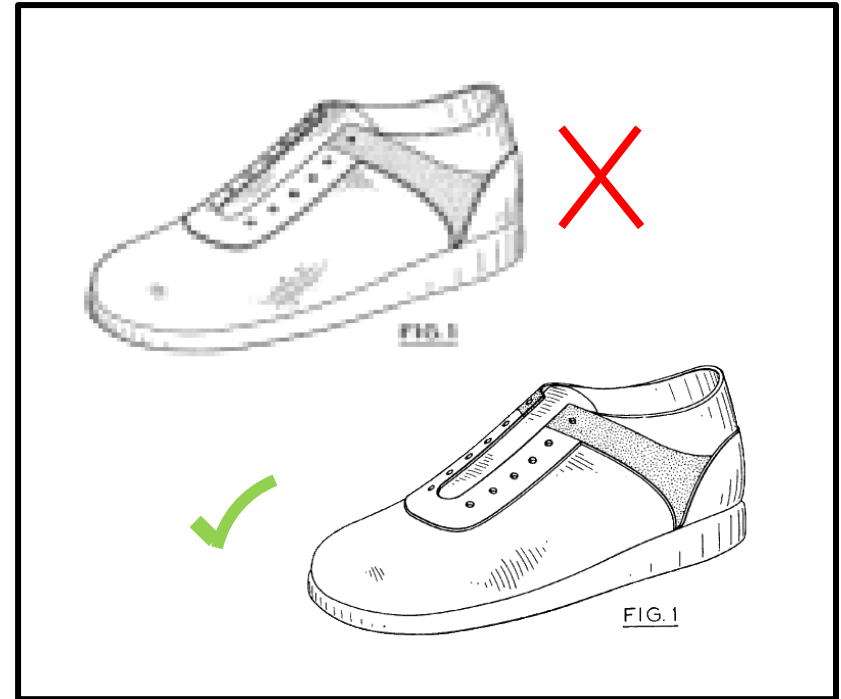
37 CFR 1.84(k)

- Drawings must be shown at a large enough scale to be clear when reduced to two-thirds scale for reproduction.
- Indications such as "Actual Size" or "Scale 1/2" are not permitted.



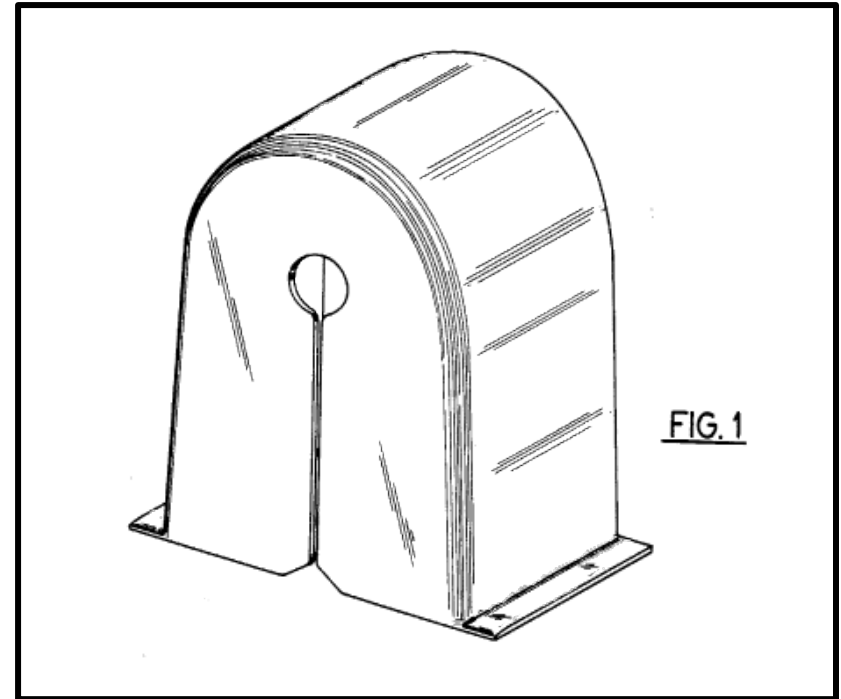
37 CFR 1.84(I)

- Lines, numbers, and letters must be clean, black (except when drawings are in color), and uniformly thick and well-defined.
- Line weight must be heavy enough to permit adequate reproduction.



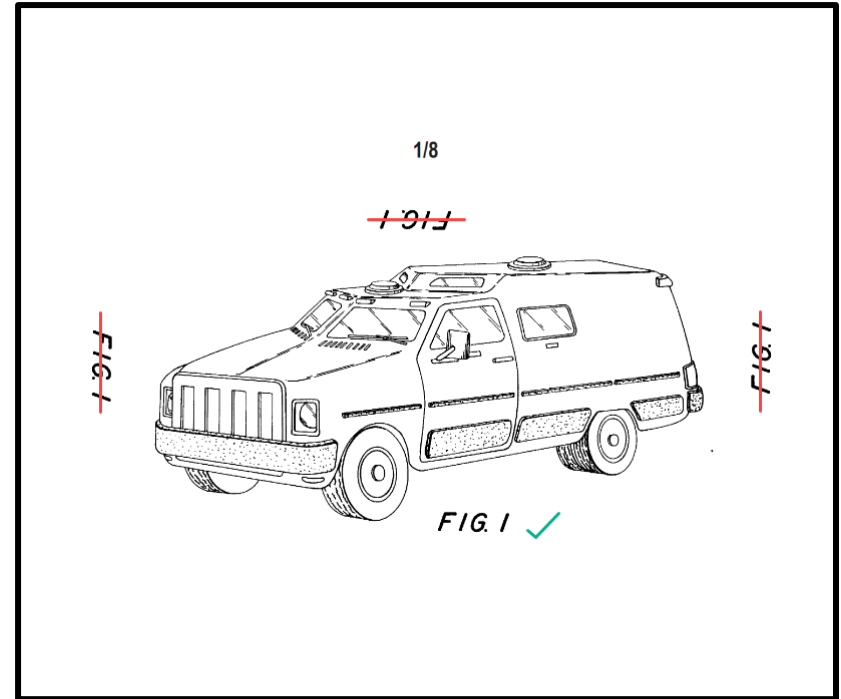
37 CFR 1.84(m)

- Shading is encouraged if it aids in understanding the design.
- Spaced lines for shading are preferred.
- Shade lines must be thin, as few in number as practicable, and must contrast with the rest of the drawings.
- Solid black shading areas are not permitted, except when used to represent color.



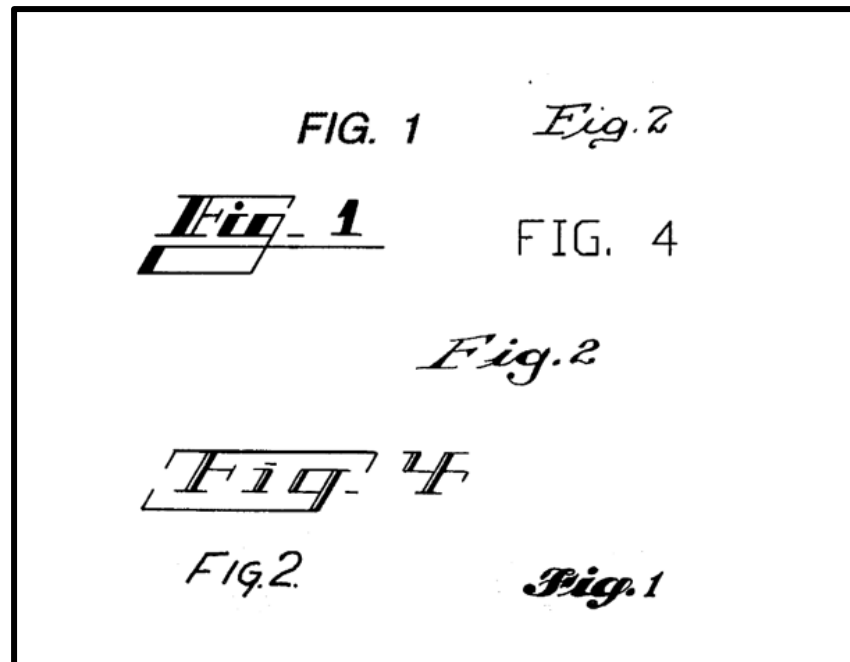
37 CFR 1.84(p)

- Sheet numbers, and view numbers must be plain and legible, and must be oriented in the same direction as the view.



37 CFR 1.84(u)

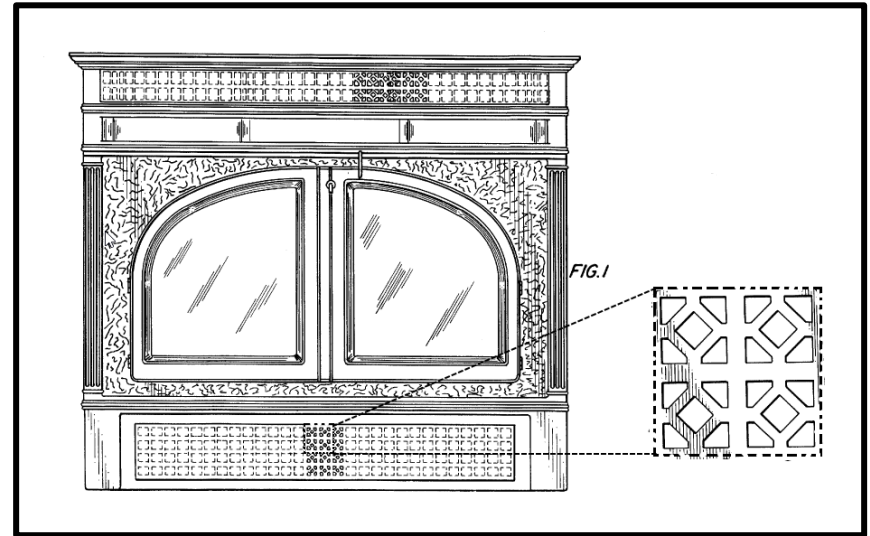
- Different views must be numbered in consecutive Arabic numerals, starting with 1, independent of the numbering of the drawing sheets.
- As much as possible, drawing views should be numbered in the order on which they appear on the sheet(s).
- View numbers must be preceded by the abbreviation "FIG."
- Where only a single view is used, it must not be numbered and the abbreviation "FIG." must not appear.



Knowledge Check 1

Which subpart could be used under rule 37 CFR 1.84 in an objection to this disclosure?

- A. 37 CFR 1.84(h)(1) Exploded Views
- B. 37 CFR 1.84(h)(2) Partial Views
- C. 37 CFR 1.84(h)(3) Sectional Views
- D. The disclosure is acceptable

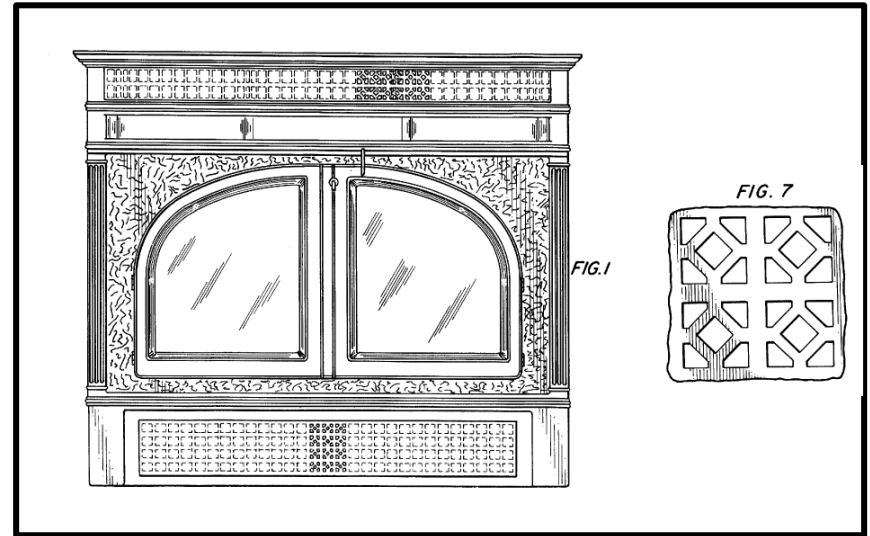


Knowledge Check 1: Answer

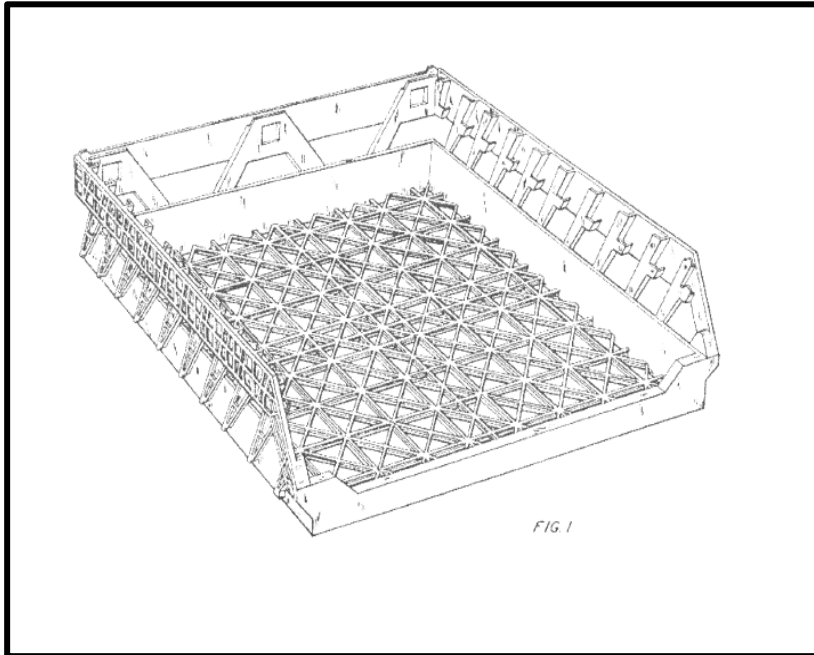
The correct answer is:

B. 37 CFR 1.84(h)(2)

When a partial view is used for magnification purposes, they **must** be labeled as separate views.



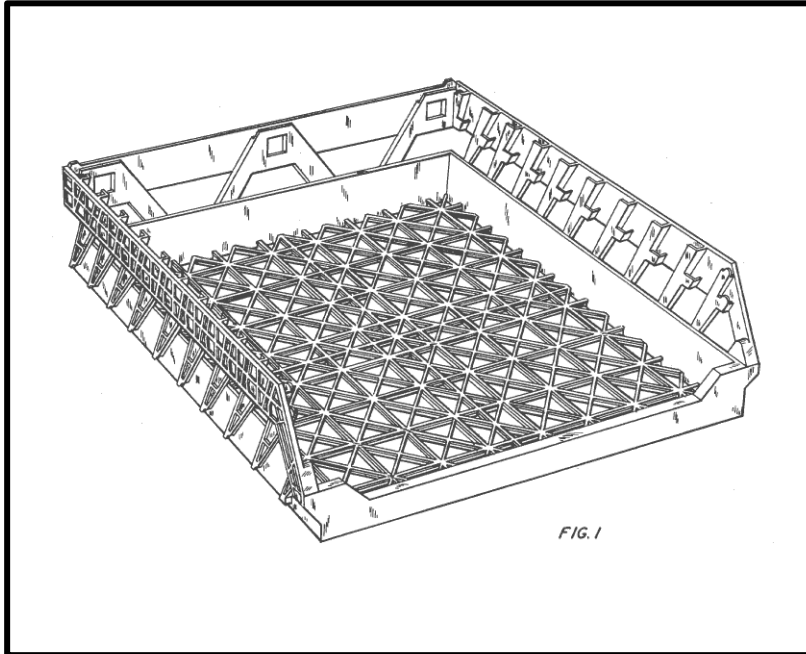
Knowledge Check 2



Which subpart could be used under rule 37 CFR 1.84 in an objection to this disclosure?

- A. 37 CFR 1.84(l) Line Quality
- B. 37 CFR 1.84(m) Shading
- C. 37 CFR 1.84(a)(1) Drawings
- D. The disclosure is acceptable

Knowledge Check 2: Answer



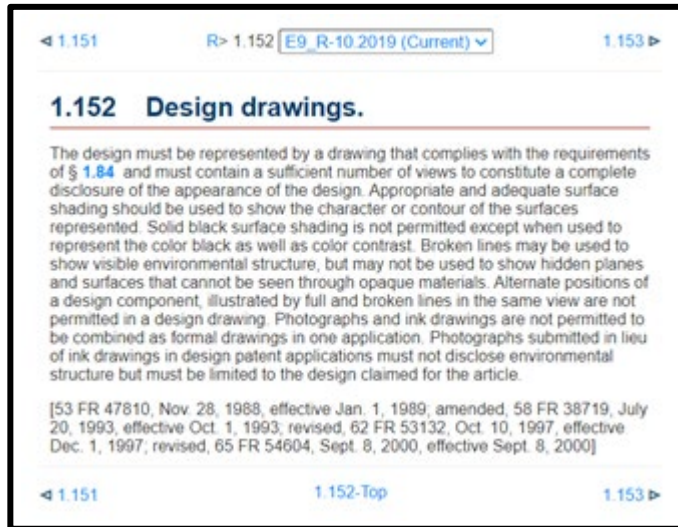
The correct answer is:

A. 37 CFR 1.84(l) Line Quality

Every line, number and letter must be durable, clean, black, sufficiently dense and dark and uniformly thick and well defined.

37 CFR 1.152 in Detail

37 CFR 1.152



◀ 1.151 R> 1.152 E9_R-10.2019 (Current) 1.153 ▶

1.152 Design drawings.

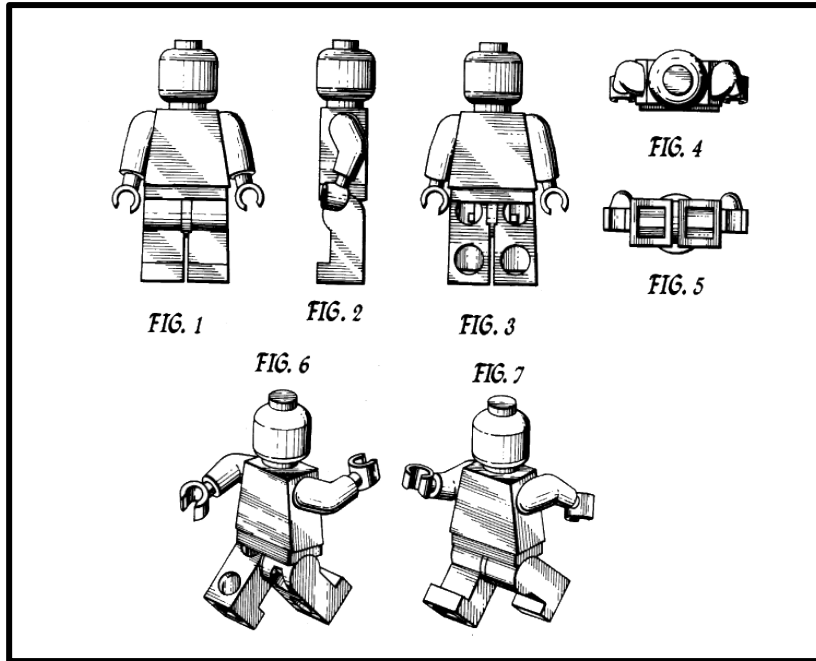
The design must be represented by a drawing that complies with the requirements of § 1.84 and must contain a sufficient number of views to constitute a complete disclosure of the appearance of the design. Appropriate and adequate surface shading should be used to show the character or contour of the surfaces represented. Solid black surface shading is not permitted except when used to represent the color black as well as color contrast. Broken lines may be used to show visible environmental structure, but may not be used to show hidden planes and surfaces that cannot be seen through opaque materials. Alternate positions of a design component, illustrated by full and broken lines in the same view are not permitted in a design drawing. Photographs and ink drawings are not permitted to be combined as formal drawings in one application. Photographs submitted in lieu of ink drawings in design patent applications must not disclose environmental structure but must be limited to the design claimed for the article.

[53 FR 47810, Nov. 28, 1988, effective Jan. 1, 1989; amended, 58 FR 38719, July 20, 1993, effective Oct. 1, 1993; revised, 62 FR 53132, Oct. 10, 1997, effective Dec. 1, 1997; revised, 65 FR 54604, Sept. 8, 2000, effective Sept. 8, 2000]

◀ 1.151 1.152-Top 1.153 ▶

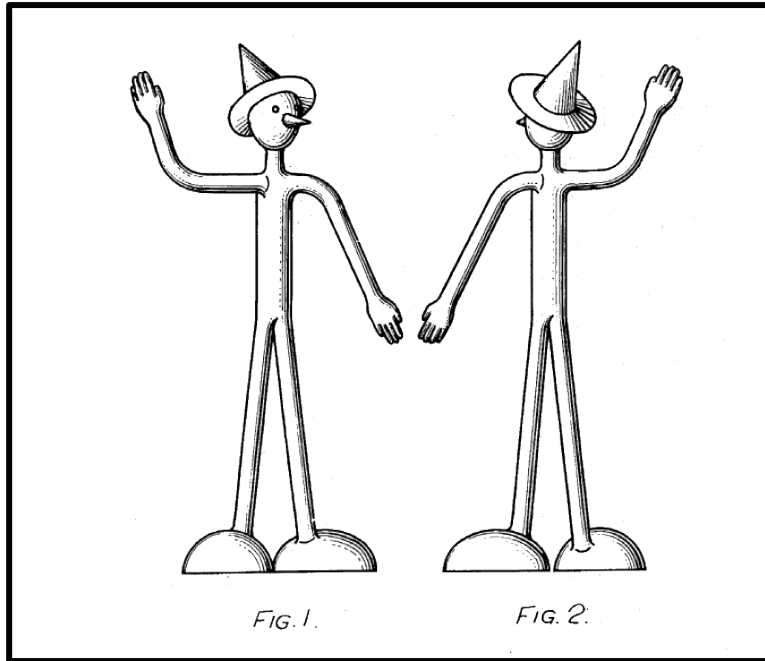
- 37 CFR 1.152 supplements the drawing subparts set forth in 37 CFR 1.84.
- The subparts to the rule are specifically for design patent applications.
- 37 CFR 1.152 consists of several different subparts as follows....

37 CFR 1.152 (cont.)



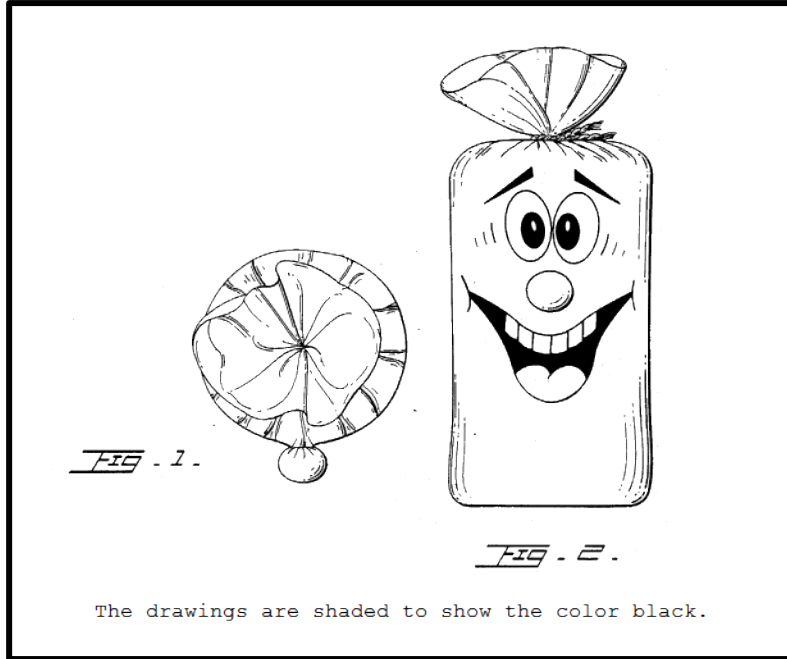
- The design must be represented by a drawing that complies with the requirements of § **1.84** and must contain a sufficient number of views to constitute a complete disclosure of the appearance of the design.

37 CFR 1.152 (cont.)



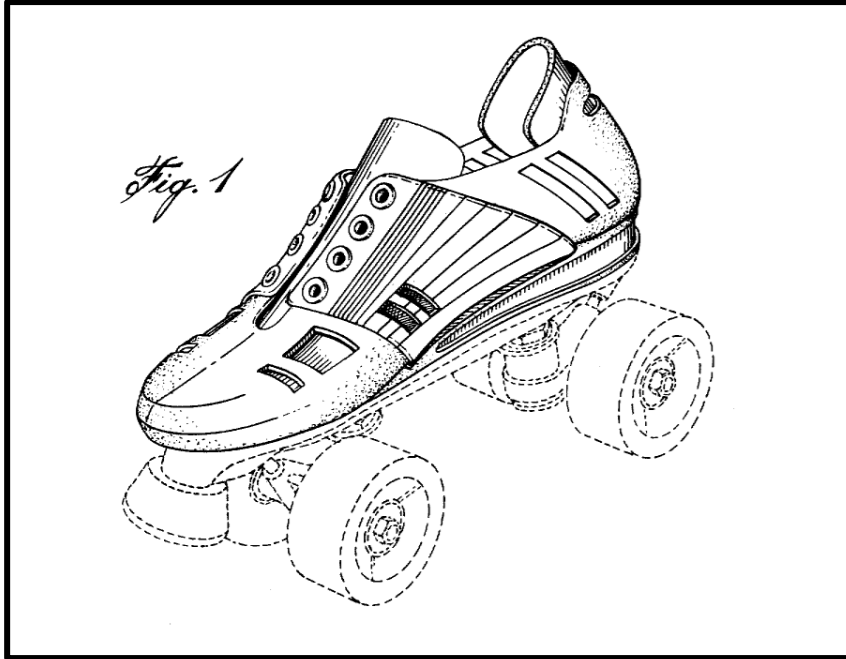
- Appropriate and adequate surface shading should be used to show the character or contour of the surfaces represented.

37 CFR 1.152 (cont.)



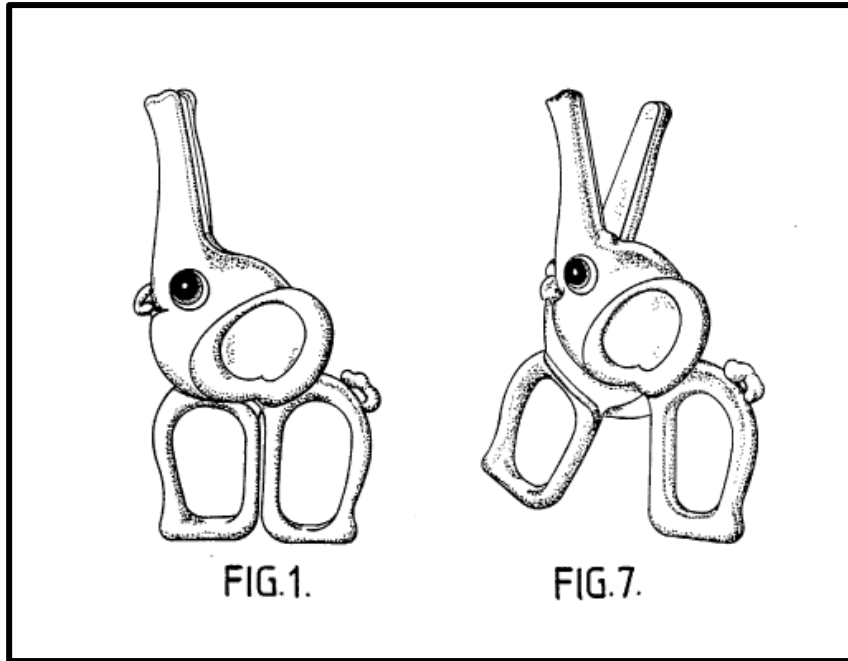
- Solid black surface shading is not permitted except when used to represent the color black as well as color contrast.

37 CFR 1.152 (cont.)



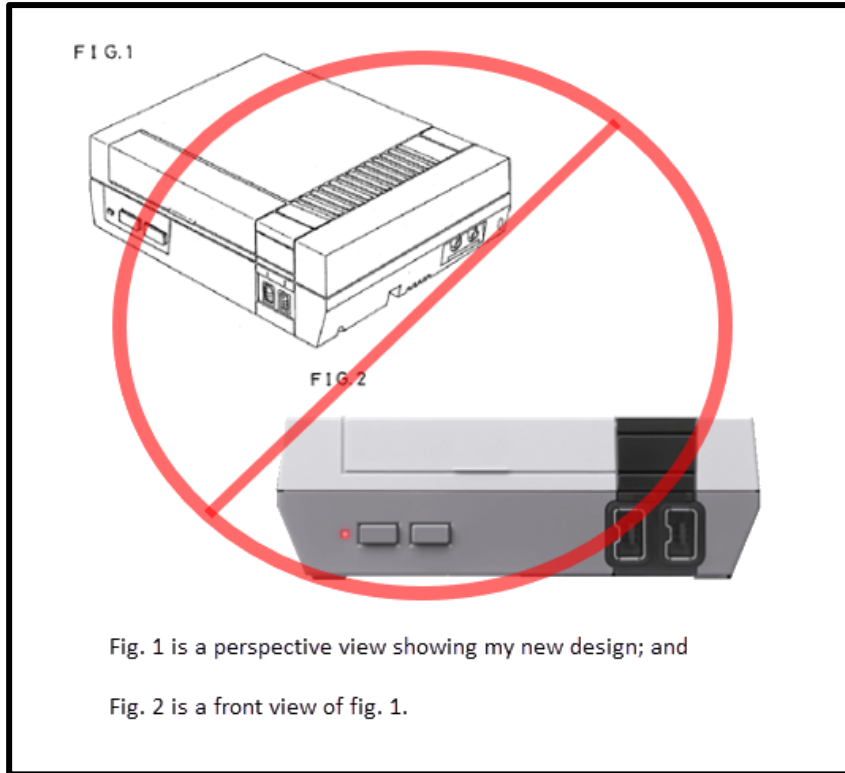
- Broken lines may be used to show visible environmental structure, but may not be used to show hidden planes and surfaces that cannot be seen through opaque materials.

37 CFR 1.152 (cont.)



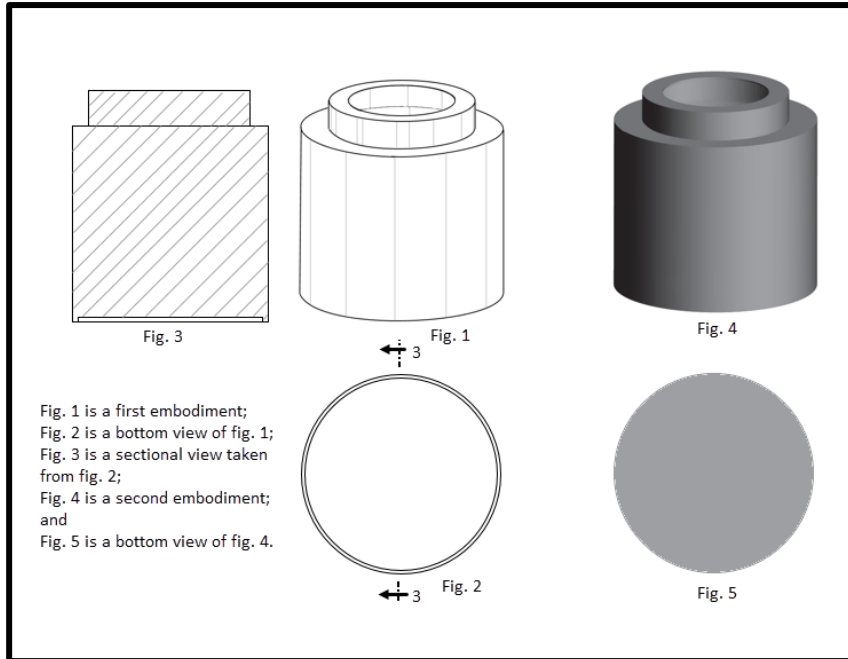
- Alternate positions of a design component, illustrated by full and broken lines in the same view are not permitted in a design drawing.

37 CFR 1.152 (cont.)



- Photographs and ink drawings are not permitted to be combined as formal drawings in one application.

37 CFR 1.152 (cont.)



- However, to provide flexibility to applicants where multiple embodiments are contained in the same application, the Office has interpreted the rule to permit photographs and ink drawings in the same application when used to disclose separate embodiments that are indistinct."

37 CFR 1.152 (cont.)

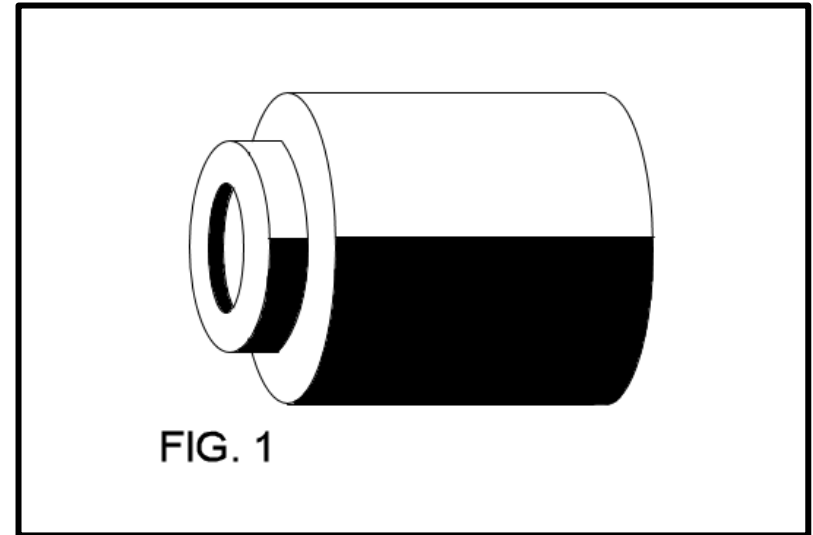


- Photographs submitted in lieu of ink drawings in design patent applications must not disclose environmental structure but must be limited to the design claimed for the article.

Knowledge Check 3

Which subpart under rule 37 CFR 1.152 could be used in an objection to this disclosure?

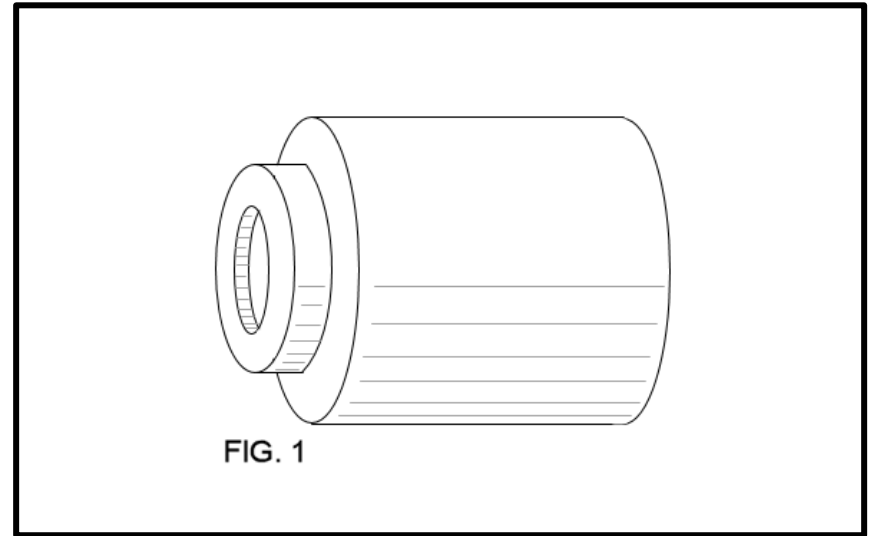
- A. Solid black surface shading is not permitted except when used to represent the color black as well as color contrast.
- B. Broken lines may be used to show visible environmental structure but may not be used to show hidden planes and surfaces that cannot be seen through opaque materials.
- C. Alternate positions of a design component, illustrated by full and broken lines in the same view are not permitted in a design drawing.



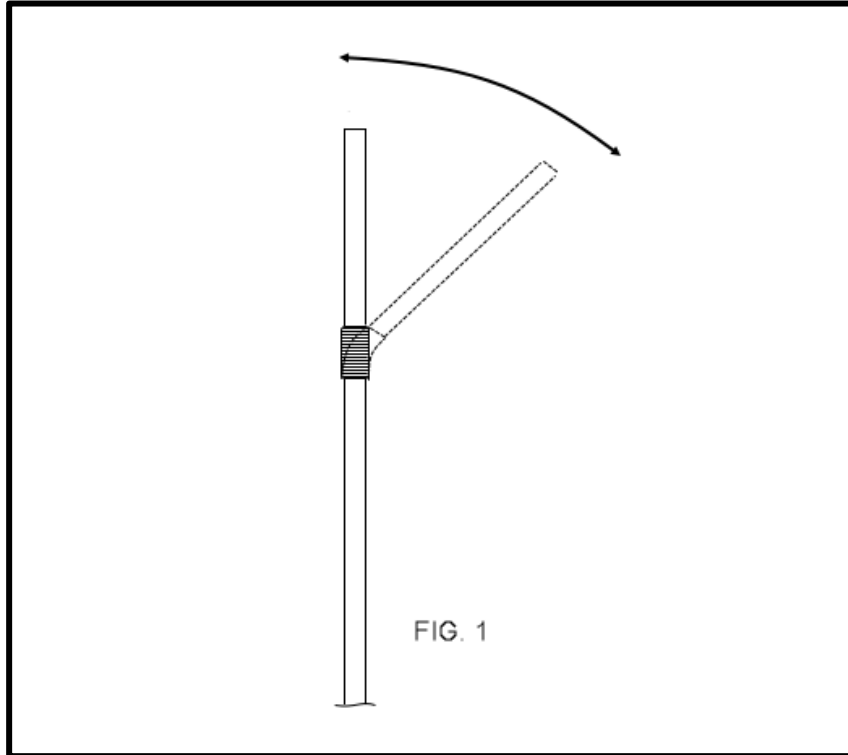
Knowledge Check 3: Answer

The correct answer is **A**.

Solid black surface shading is not permitted except when used to represent the color black as well as color contrast.



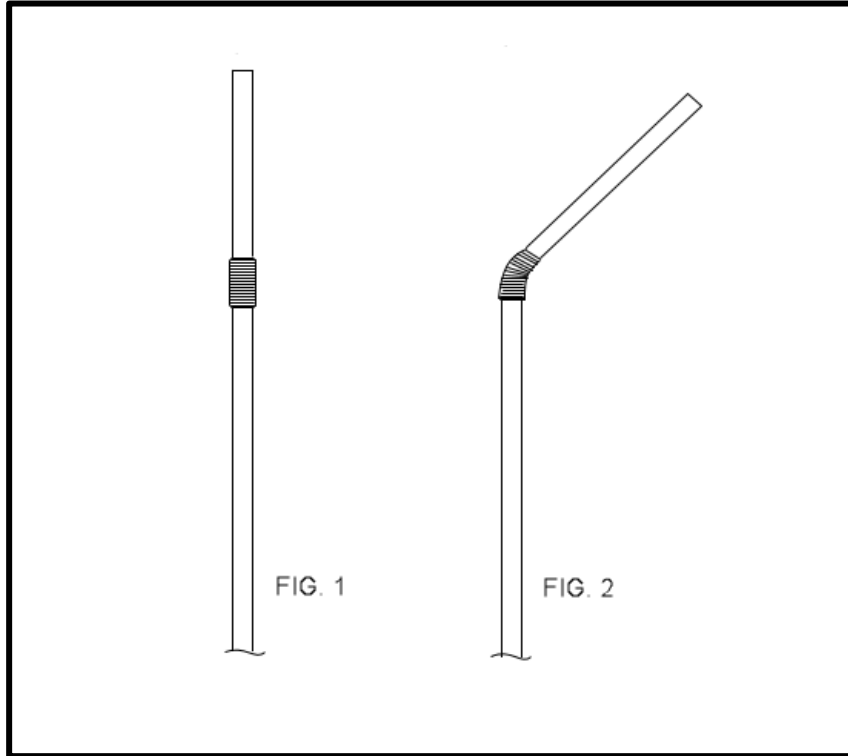
Knowledge Check 4



Which subpart under rule 37 CFR 1.152 could be used in an objection to this disclosure?

- A. Broken lines may be used to show visible environmental structure, but may not be used to show hidden planes and surfaces that cannot be seen through opaque materials.
- B. Photographs and ink drawings are not permitted to be combined as formal drawings in one application.
- C. Alternate positions of a design component, illustrated by full and broken lines in the same view are not permitted in a design drawing.

Knowledge Check 4: Answer



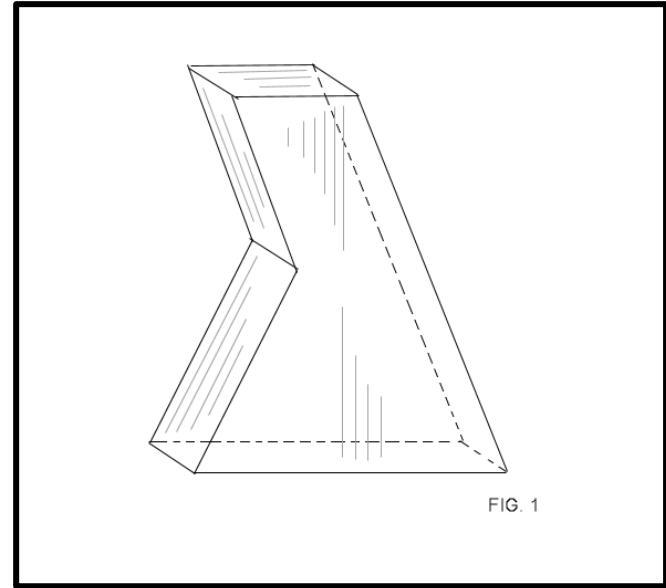
The correct answer is **C**.

Alternate positions of a design component, illustrated by full and broken lines in the same view are not permitted in a design drawing.

Knowledge Check 5

Which subpart under rule 37 CFR 1.152 could be used in an objection to this disclosure?

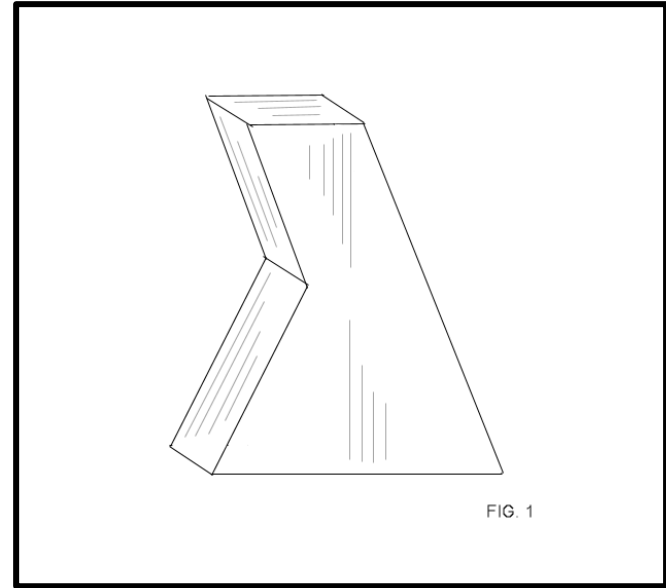
- A. Solid black surface shading is not permitted except when used to represent the color black as well as color contrast.
- B. Broken lines may be used to show visible environmental structure, but may not be used to show hidden planes and surfaces that cannot be seen through opaque materials.
- C. Alternate positions of a design component, illustrated by full and broken lines in the same view are not permitted in a design drawing.



Knowledge Check 5: Answer

The correct answer is **B**.

Broken lines may not be used to show hidden planes and surfaces through opaque materials.



MPEP 1503.02 Drawings

MPEP 1503.02 – Inconsistencies

When inconsistencies are found among the views, the examiner should object to the drawings and request that the views be made consistent. *Ex parte Asano*, 201 USPQ 315, 317 (Bd. Pat. App. & Inter. 1978); *Hadco Products, Inc. v. Lighting Corp. of America Inc.*, 312 F. Supp. 1173, 1182, 165 USPQ 496, 503 (E.D. Pa. 1970), *vacated on other grounds*, 462 F.2d 1265, 174 USPQ 358 (3d Cir. 1972). When the inconsistencies are of such magnitude that the overall appearance of the design is unclear, the claim should be rejected under 35 U.S.C. 112(a) and (b), (or for applications filed prior to September 16, 2012, pre-AIA 35 U.S.C. 112, first and second paragraphs), as nonenabling and indefinite. See MPEP § 1504.04, subsection I.A.

Inconsistencies (emphasized):

- When inconsistencies are found among the views, the examiner should object to the drawings and request that the views be made consistent.

MPEP 1503.02 – Inconsistencies (*cont.*)

When inconsistencies are found among the views, the examiner should object to the drawings and request that the views be made consistent. *Ex parte Asano*, 201 USPQ 315, 317 (Bd. Pat. App. & Inter. 1978); *Hadco Products, Inc. v. Lighting Corp. of America Inc.*, 312 F. Supp. 1173, 1182, 165 USPQ 496, 503 (E.D. Pa. 1970), *vacated on other grounds*, 462 F.2d 1265, 174 USPQ 358 (3d Cir. 1972).

When the inconsistencies are of such magnitude that the overall appearance of the design is unclear, the claim should be rejected under **35 U.S.C. 112(a)** and **(b)**, (or for applications filed prior to September 16, 2012, **pre-AIA 35 U.S.C. 112**, first and second paragraphs), as nonenabling and indefinite. See **MPEP § 1504.04**, subsection I.A.

Inconsistencies (emphasized):

- When the inconsistencies are of such magnitude that the overall appearance of the design is unclear, the claim should be rejected under 35 USC 112(a) and (b)

MPEP 1503.02 – Inconsistencies (*cont.*)

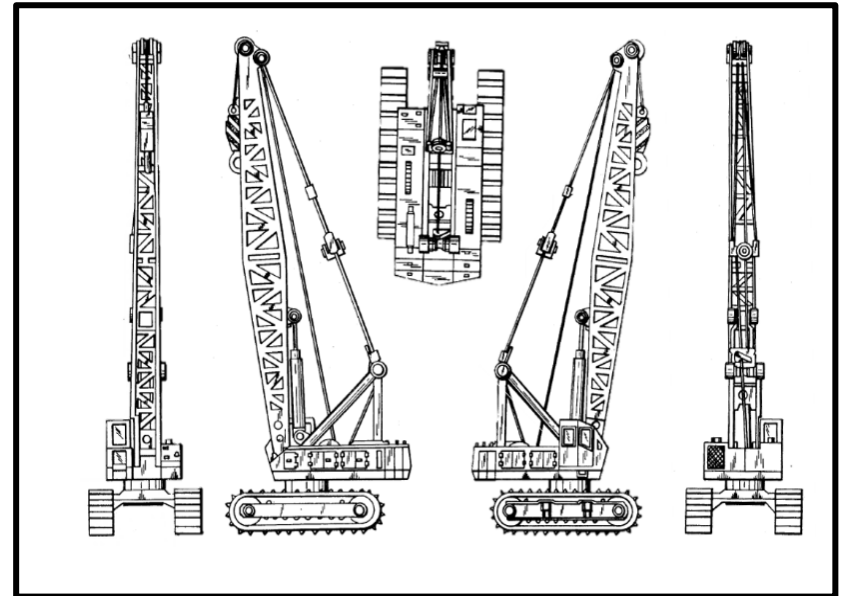
When inconsistencies are found among the views, the examiner should object to the drawings and request that the views be made consistent. *Ex parte Asano*, 201 USPQ 315, 317 (Bd. Pat. App. & Inter. 1978); *Hadco Products, Inc. v. Lighting Corp. of America Inc.*, 312 F. Supp. 1173, 1182, 165 USPQ 496, 503 (E.D. Pa. 1970), *vacated on other grounds*, 462 F.2d 1265, 174 USPQ 358 (3d Cir. 1972). When the inconsistencies are of such magnitude that the overall appearance of the design is unclear, the claim should be rejected under **35 U.S.C. 112(a)** and **(b)**, (or for applications filed prior to September 16, 2012, **pre-AIA 35 U.S.C. 112**, first and second paragraphs), as nonenabling and indefinite. See **MPEP § 1504.04**, subsection I.A.

- Examiners should understand this as meaning that an inconsistency that affects an understanding of the drawings as a whole provided in the disclosure should be elevated to a rejection.

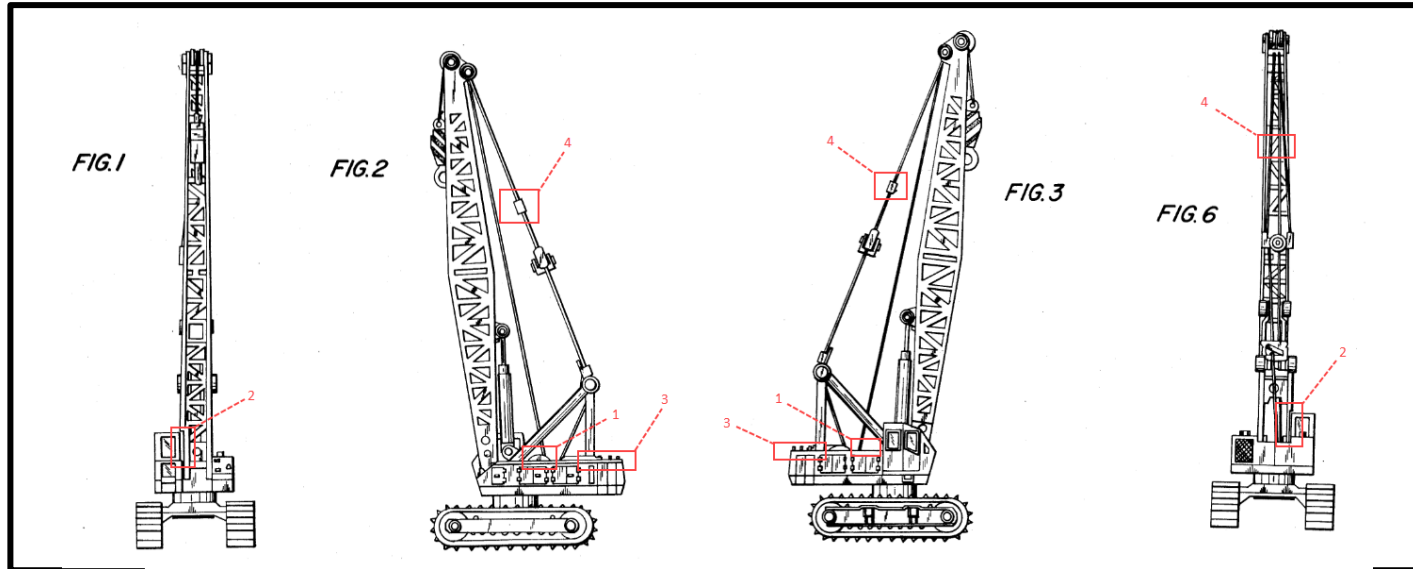
MPEP 1503.02 – Inconsistencies (cont.)

EXAMPLE:

- The claim is for a toy construction vehicle.
- The examiner finds several inconsistencies between the views (next slide).



MPEP 1503.02 – Inconsistencies (*cont.*)



1. The reel-like structure on the vehicle body connected to the boom attachment cable in Figure 2 is not shown in Figure 3.
2. The boom is spaced from the vehicle cab in Figure 1, but touching the cab in Figure 6.
3. The box-like structure at the base of the pivot connecting the boom to the hydraulic cylinder shown in Figure 2 does not appear in Figure 3.
4. The attachment to the boom cable is not shown as in Figure 6.

MPEP 1503.02 – Inconsistencies (*cont.*)

What should the examiner do?

- The examiner found many inconsistencies but the severity of those inconsistencies are minor, drafting mistakes, or inconsequential.
- The complexity of the claimed design is such that the inconsistencies found do not preclude an overall understanding of the design as a whole.
- As a result, these inconsistencies do not reach the magnitude of a 35 U.S.C. 112(a) and (b) rejection.

MPEP 1503.02 – Inconsistencies (*cont.*)

What should the examiner do? (*cont.*)

- However, applicant should provide accurate drawings.
- MPEP 1503.02 guides the examiner to object to the drawings and request that the drawings be made consistent.
 - When inconsistencies are found among the views, the examiner should object to the drawings and request that the views be made consistent. *Ex parte Asano*, 201 USPQ 315, 317 (Bd. Pat. App. & Inter. 1978); *Hadco Products, Inc. v. Lighting Corp. of America Inc.*, 312 F. Supp. 1173, 1182, 165 USPQ 496, 503 (E.D. Pa. 1970), vacated on other grounds, 462 F.2d 1265, 174 USPQ 358 (3d Cir. 1972).
- Based on this guidance, it would be appropriate for the examiner to object to the inconsistencies that were found.

Knowledge Check 6

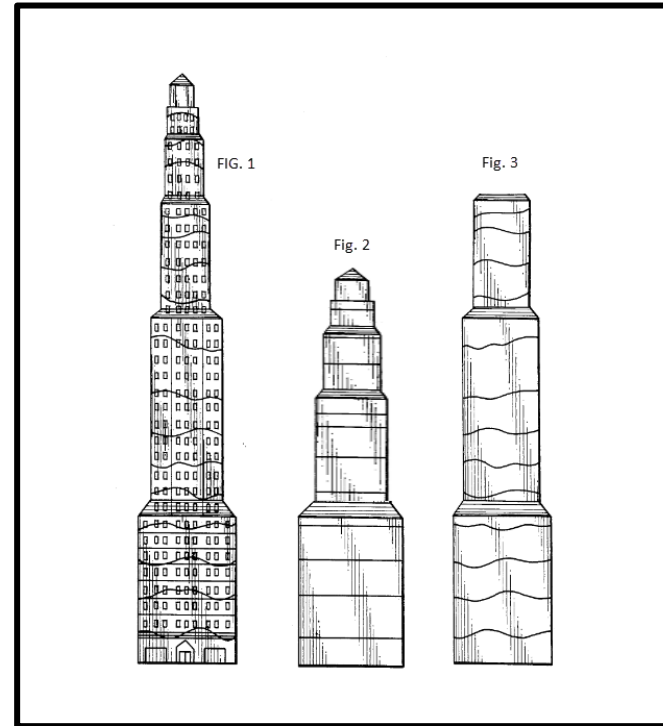
The claim is for a building model.

Fig. 1 is a front view.

Fig. 2 is a side view thereof.

Fig. 3 is a rear view thereof.

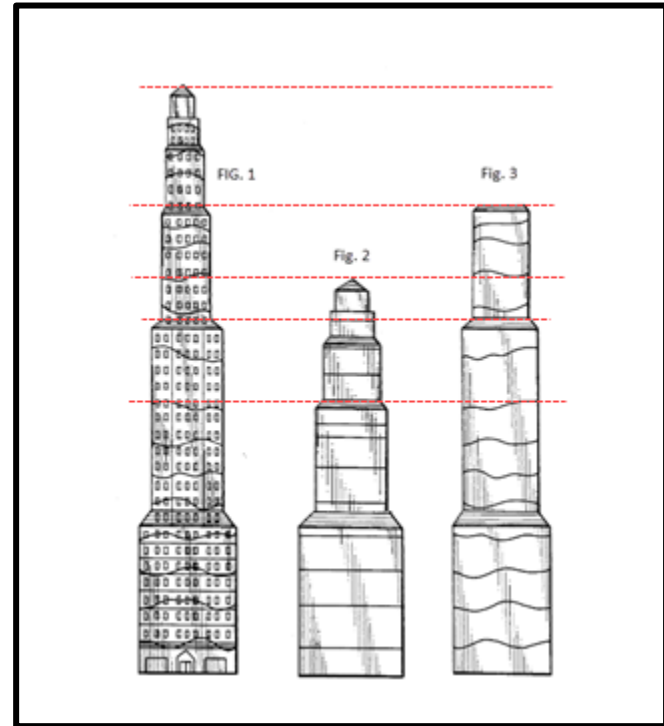
What should the examiner do?



Knowledge Check 6

What should the examiner do?

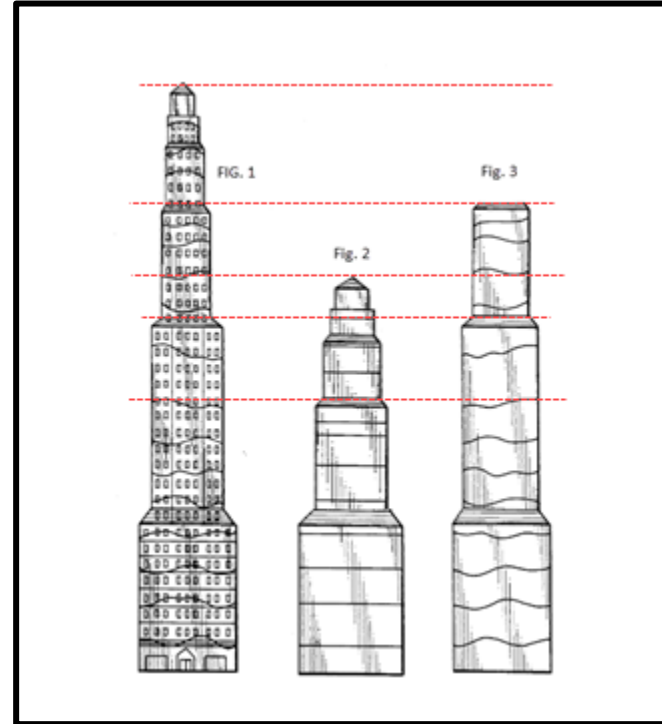
- A. Reject the claim under 35 U.S.C. 112(a) and (b).
- B. Object to the drawings and request that the views be made consistent under MPEP 1503.02.
- C. Nothing, the disclosure is fine as presented.



Knowledge Check 6: Answer

The correct answer is **A**.

When the inconsistencies are of such magnitude that the overall appearance of the design is unclear, the claim should be rejected under 35 U.S.C. 112(a) and (b)



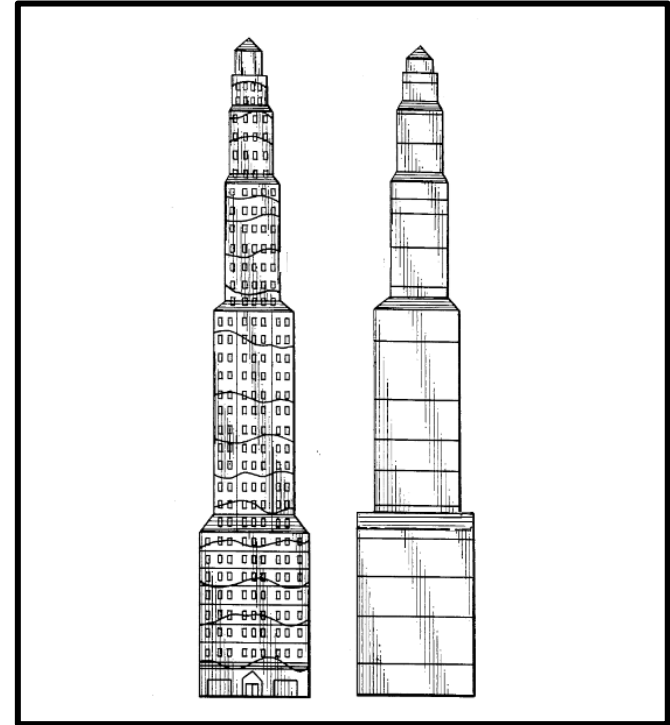
Knowledge Check 7

The claim is for a building model.

Fig. 1 is a front view.

Fig. 2 is a rear view thereof.

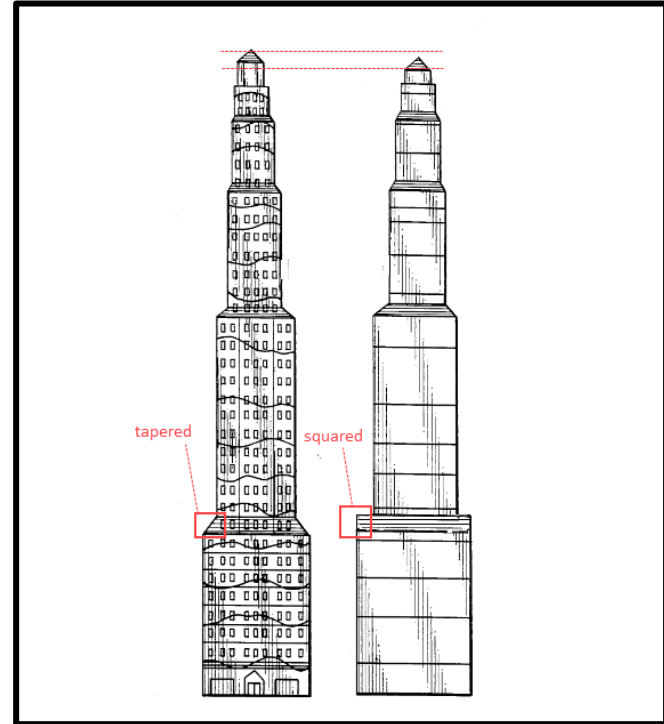
What should the examiner do?



Knowledge Check 7

What should the examiner do?

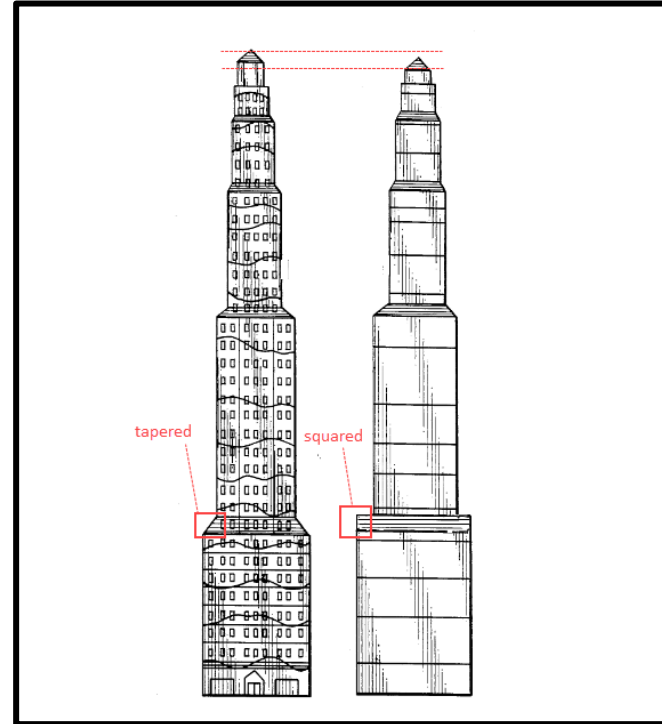
- A. Reject the claim under 35 USC 112(a) and (b).
- B. Object to the drawings and request that the views be made consistent under MPEP 1503.02.
- C. Nothing, the disclosure is fine as presented.



Knowledge Check 7: Answer

The correct answer is **B**.

“When inconsistencies are found among the views, the examiner should object to the drawings and request that the views be made consistent” in accordance with MPEP 1503.02.



MPEP 1503.02 – Subsections

1503.02 Drawing [R-10.2019]

37 C.F.R. 1.152 Design drawings.

The design must be represented by a drawing that complies with the requirements of § 1.84 and must contain a sufficient number of views to constitute a complete disclosure of the appearance of the design. Appropriate and adequate surface shading should be used to show the character or contour of the surfaces represented. Solid black surface shading is not permitted except when used to represent the color black as well as color contrast. Broken lines may be used to show visible environmental structure, but may not be used to show hidden planes and surfaces that cannot be seen through opaque materials. Alternate positions of a design component, illustrated by full and broken lines in the same view are not permitted in a design drawing. Photographs and ink drawings are not permitted to be combined as formal drawings in one application. Photographs submitted in lieu of ink drawings in design patent applications must not disclose environmental structure but must be limited to the design claimed for the article.

Every design patent application must include either a drawing or a photograph of the claimed design. As the drawing or photograph constitutes the entire visual disclosure of the claim, it is of utmost importance that the drawing or photograph be clear and complete, and that nothing regarding the design sought to be patented is left to conjecture.

When inconsistencies are found among the views, the examiner should object to the drawings and request that the views be made consistent. *Ex parte Asano*, 201 USPQ 315, 317 (Bd. Pat. App. & Inter. 1978); *Hadco Products, Inc. v. Lighting Corp. of America Inc.*, 312 F. Supp. 1173, 1182, 165 USPQ 496, 503 (E.D. Pa. 1970), vacated on other grounds, 462 F.2d 1265, 174 USPQ 358 (3d Cir. 1972). When the inconsistencies are of such magnitude that the overall appearance of the design is unclear, the claim should be rejected under 35 U.S.C. 112(a) and (b), (or for applications filed prior to September 16, 2012, pre-AIA 35 U.S.C. 112, first and second paragraphs), as nonenabling and indefinite. See MPEP § 1504.04, subsection I.A.

¶ 15.05.03 Drawing/Photograph Disclosure Objected To

The drawing/photograph disclosure is objected to because [1].

Examiner Note:

In bracket 1, insert the reason for the objection.

¶ 15.05.04 Replacement Drawing Sheets Required

MPEP 1503.02 is divided into 5 subsections:

- I. Views
- II. Surface Shading
- III. Broken Lines*
- IV. Surface Treatment*
- V. Photographs and Color Drawings

*Sections III and IV will not be covered in this training.

MPEP 1503.02(I): Views

The drawings or photographs should contain a sufficient number of views to disclose the complete appearance of the design claimed, which may include the front, rear, top, bottom and sides. Perspective views are suggested and may be submitted to clearly show the appearance of three dimensional designs. If a perspective view is submitted, the surfaces shown would normally not be required to be illustrated in other views if these surfaces are clearly understood and fully disclosed in the perspective.

Views that are merely duplicative of other views of the design or that are flat and include no surface ornamentation may be omitted from the drawing if the specification makes this explicitly clear. See [MPEP § 1503.01](#), subsection II. For example, if the left and right sides of a design are identical or a mirror image, a view should be provided of one side and a statement made in the drawing description that the other side is identical or a mirror image. If the design has a flat bottom, a view of the bottom may be omitted if the specification includes a statement that the bottom is flat and devoid of surface ornamentation. The term "unornamented" should not be used to describe visible surfaces which include structure that is clearly not flat. *Philco Corp. v. Admiral Corp.*, 199 F. Supp. 797, 131 USPQ 413 (D. Del. 1961).

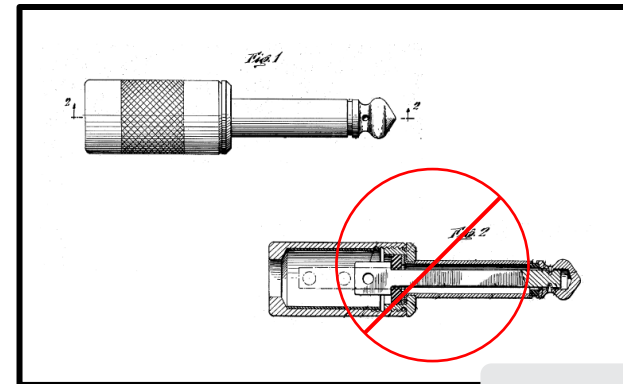
Sectional views presented solely for the purpose of showing the internal construction or functional/ mechanical features are unnecessary and may lead to confusion as to the scope of the claimed design. The examiner should object to such views and require their cancellation. *Ex parte Tucker*, 1901 C.D. 140, 97 O.G. 187 (Comm'r Pat. 1901); *Ex parte Kohler*, 1905 C.D. 192, 116 O.G. 1185 (Comm'r Pat. 1905).

However, where the exact contour or configuration of the exterior surface of a claimed design is not apparent from the views of the drawing, and no attempt is made to illustrate features of internal construction, a sectional view may be included to clarify the shape of said design. *Ex parte Lohman*, 1912 C.D. 336, 184 O.G. 287 (Comm'r Pat. 1912).

When a sectional view is added during prosecution, the examiner must determine whether there is antecedent basis in the original disclosure for the material shown in hatching in the sectional view [37 CFR 1.84\(h\)\(3\)](#) and [MPEP § 608.02](#).

Sectional views (Emphasized)

- Are **not permitted** when the sole purpose is to illustrate internal, functional or mechanical features.



MPEP 1503.02(I): Views (cont.)

The drawings or photographs should contain a sufficient number of views to disclose the complete appearance of the design claimed, which may include the front, rear, top, bottom and sides. Perspective views are suggested and may be submitted to clearly show the appearance of three dimensional designs. If a perspective view is submitted, the surfaces shown would normally not be required to be illustrated in other views if these surfaces are clearly understood and fully disclosed in the perspective.

Views that are merely duplicative of other views of the design or that are flat and include no surface ornamentation may be omitted from the drawing if the specification makes this explicitly clear. See **MPEP § 1503.01**, subsection II. For example, if the left and right sides of a design are identical or a mirror image, a view should be provided of one side and a statement made in the drawing description that the other side is identical or a mirror image. If the design has a flat bottom, a view of the bottom may be omitted if the specification includes a statement that the bottom is flat and devoid of surface ornamentation. The term "unornamented" should not be used to describe visible surfaces which include structure that is clearly not flat. *Philco Corp. v. Admiral Corp.*, 199 F. Supp. 797, 131 USPQ 413 (D. Del. 1961).

Sectional views presented solely for the purpose of showing the internal construction or functional/ mechanical features are unnecessary and may lead to confusion as to the scope of the claimed design. The examiner should object to such views and require their cancellation. *Ex parte Tucker*, 1901 C.D. 140, 97 O.G. 187 (Comm'r Pat. 1901); *Ex parte Kohler*, 1905 C.D. 192, 116 O.G. 1185 (Comm'r Pat. 1905). However, where the exact contour or configuration of the exterior surface of a claimed design is not apparent from the views of the drawing, and no attempt is made to illustrate features of internal construction, a sectional view may be included to clarify the shape of said design. *Ex parte Lohman*, 1912 C.D. 336, 184 O.G. 287 (Comm'r Pat. 1912).

When a sectional view is added during prosecution, the examiner must determine whether there is antecedent basis in the original disclosure for the material shown in hatching in the sectional view **37 CFR 1.84(h)(3)**, and **MPEP § 608.02**.

Sectional views (Emphasized)

- Are **permitted** when clarifying the shape of the claim.



MPEP 1503.02(II): Surface shading

While surface shading is not required under **37 CFR 1.152**, it may be necessary in particular cases to shade the figures to show clearly the character and contour of all surfaces of any 3-dimensional aspects of the design. Surface shading is also necessary to distinguish between any open and solid areas of the article. However, surface shading should not be used on unclaimed subject matter, shown in broken lines, to avoid confusion as to the scope of the claim.

Lack of appropriate surface shading in the drawing as filed may render the design non-enabling and indefinite under **35 U.S.C. 112(a)** and **(b)**, (or for applications filed prior to September 16, 2012, **pre-AIA 35 U.S.C. 112**, first and second paragraphs). Additionally, if the surface shape is not evident from the disclosure as filed, the addition of surface shading after filing may comprise new matter. Solid black surface shading is not permitted except when used to represent the color black as well as color contrast. Oblique line shading must be used to show transparent, translucent and highly polished or reflective surfaces, such as a mirror. Contrast in materials may be shown by using line shading in one area and stippling in another. By using this technique, the claim will broadly cover contrasting surfaces unlimited by colors. The claim would not be limited to specific material either, as long as the appearance of the material does not patentably depart from the visual appearance illustrated in the drawing.

Surface shading (Emphasized):

- Surface shading is not required.
- It may be necessary to clearly show the character and contour of all surfaces or any 3-dimensional aspects of the design.
- It may also be necessary to distinguish between any open and solid areas of the article.

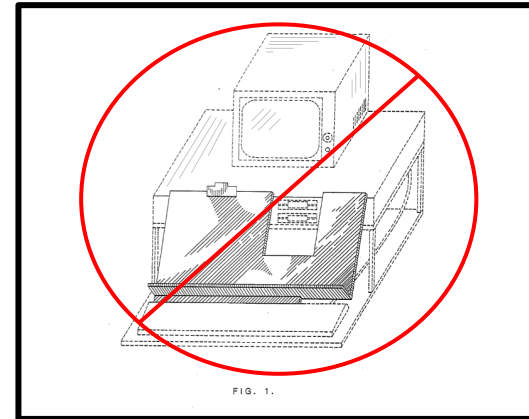
MPEP 1503.02(II): Surface shading (cont.)

While surface shading is not required under **37 CFR 1.152**, it may be necessary in particular cases to shade the figures to show clearly the character and contour of all surfaces of any 3-dimensional aspects of the design. Surface shading is also necessary to distinguish between any open and solid areas of the article. However, surface shading should not be used on unclaimed subject matter, shown in broken lines, to avoid confusion as to the scope of the claim.

Lack of appropriate surface shading in the drawing as filed may render the design non-enabling and indefinite under **35 U.S.C. 112(a)** and **(b)**, (or for applications filed prior to September 16, 2012, **pre-AIA 35 U.S.C. 112**, first and second paragraphs). Additionally, if the surface shape is not evident from the disclosure as filed, the addition of surface shading after filing may comprise new matter. Solid black surface shading is not permitted except when used to represent the color black as well as color contrast. Oblique line shading must be used to show transparent, translucent and highly polished or reflective surfaces, such as a mirror. Contrast in materials may be shown by using line shading in one area and stippling in another. By using this technique, the claim will broadly cover contrasting surfaces unlimited by colors. The claim would not be limited to specific material either, as long as the appearance of the material does not patentably depart from the visual appearance illustrated in the drawing.

Surface shading (Emphasized):

- Surface shading should not be used on unclaimed subject matter, shown in broken lines.



MPEP 1503.02(II): Surface shading (*cont.*)

While surface shading is not required under **37 CFR 1.152**, it may be necessary in particular cases to shade the figures to show clearly the character and contour of all surfaces of any 3-dimensional aspects of the design. Surface shading is also necessary to distinguish between any open and solid areas of the article. However, surface shading should not be used on unclaimed subject matter, shown in broken lines, to avoid confusion as to the scope of the claim.

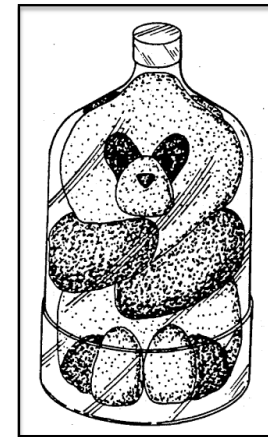
Lack of appropriate surface shading in the drawing as filed may render the design non-enabling and indefinite under **35 U.S.C. 112(a)** and **(b)**, (or for applications filed prior to September 16, 2012, **pre-AIA 35 U.S.C. 112**, first and second paragraphs).

Additionally, if the surface shape is not evident from the disclosure as filed, the addition of surface shading after filing may comprise new matter. Solid black surface shading is not permitted except when used to represent the color black as well as color contrast.

Oblique line shading must be used to show transparent, translucent and highly polished or reflective surfaces, such as a mirror. Contrast in materials may be shown by using line shading in one area and stippling in another. By using this technique, the claim will broadly cover contrasting surfaces unlimited by colors. The claim would not be limited to specific material either, as long as the appearance of the material does not patentably depart from the visual appearance illustrated in the drawing.

Surface shading (Emphasized):

- Oblique Line shading must be used to show transparent and highly polished or reflective surfaces.



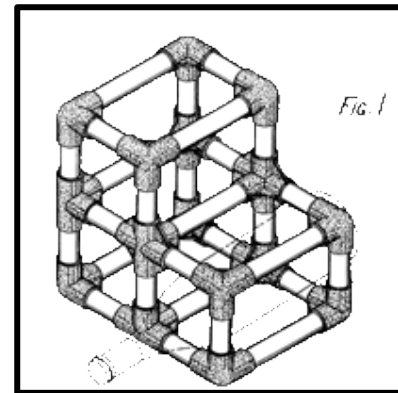
MPEP 1503.02(II): Surface shading (*cont.*)

While surface shading is not required under **37 CFR 1.152**, it may be necessary in particular cases to shade the figures to show clearly the character and contour of all surfaces of any 3-dimensional aspects of the design. Surface shading is also necessary to distinguish between any open and solid areas of the article. However, surface shading should not be used on unclaimed subject matter, shown in broken lines, to avoid confusion as to the scope of the claim.

Lack of appropriate surface shading in the drawing as filed may render the design non-enabling and indefinite under **35 U.S.C. 112(a)** and **(b)**, (or for applications filed prior to September 16, 2012, **pre-AIA 35 U.S.C. 112**, first and second paragraphs). Additionally, if the surface shape is not evident from the disclosure as filed, the addition of surface shading after filing may comprise new matter. Solid black surface shading is not permitted except when used to represent the color black as well as color contrast. Oblique line shading must be used to show transparent, translucent and highly polished or reflective surfaces, such as a mirror. Contrast in materials may be shown by using line shading in one area and stippling in another. By using this technique, the claim will broadly cover contrasting surfaces unlimited by colors. The claim would not be limited to specific material either, as long as the appearance of the material does not patentably depart from the visual appearance illustrated in the drawing.

Surface shading (Emphasized):

- Contrast in materials may be shown by using line shading in one area and stippling in the other.



MPEP 1503.02(V) – Photographs (*cont.*)

If the photographs are not of sufficient quality so that all details in the photographs are reproducible, this will form the basis of subsequent objection to the quality of the photographic disclosure. No application will be issued until objections directed to the quality of the photographic disclosure have been resolved and acceptable photographs have been submitted and approved by the examiner. If the details, appearance and shape of all the features and portions of the design are not clearly disclosed in the photographs, this would form the basis of a rejection of the claim under **35 U.S.C. 112(a)** and **(b)**, (or for applications filed prior to September 16, 2012, **35 U.S.C. 112**, first and second paragraphs), as non-enabling and indefinite.

Photographs and drawings must not be combined in a submission of the visual disclosure of the claimed design in one application. The introduction of both photographs and drawings in a design application would result in a high probability of inconsistencies between corresponding elements on the drawings as compared with the photographs.

When filing photographs or drawings with the original application, a disclaimer included in the specification or on the photographs themselves may be used to disclaim any surface ornamentation, logos, written matter, etc. which form no part of the claimed design. See also **MPEP § 1503.01**, subsection II.

Photographs (Emphasized)

- If the photographs are not sufficient quality, the disclosure should be objected to.

MPEP 1503.02(V) – Photographs (*cont.*)

If the photographs are not of sufficient quality so that all details in the photographs are reproducible, this will form the basis of subsequent objection to the quality of the photographic disclosure. No application will be issued until objections directed to the **quality** of the photographic disclosure have been resolved and acceptable photographs have been submitted and approved by the examiner. If the details, appearance and shape of all the features and portions of the design are not clearly disclosed in the photographs, this would form the basis of a rejection of the claim under **35 U.S.C. 112(a)** and **(b)**, (or for applications filed prior to September 16, 2012, **35 U.S.C. 112**, first and second paragraphs), as non-enabling and indefinite. Photographs and drawings must not be combined in a submission of the visual disclosure of the claimed design in one application. The introduction of both photographs and drawings in a design application would result in a high probability of inconsistencies between corresponding elements on the drawings as compared with the photographs. When filing photographs or drawings with the original application, a disclaimer included in the specification or on the photographs themselves may be used to disclaim any surface ornamentation, logos, written matter, etc. which form no part of the claimed design. See also **MPEP § 1503.01**, subsection II.

Photographs (Emphasized)

- No application will be issued until the objections directed to the quality of the photographs have been resolved and acceptable photographs have been submitted and approved by the examiner.

MPEP 1503.02(V) – Color drawings

Color drawings are permitted in design applications when filed in accordance with the requirements of **37 CFR 1.84(a)(2)**. Color may also be shown in pen and ink drawings by lining the surfaces of the design for color in accordance with the symbols in **MPEP § 608.02**. If the drawing in an application is lined for color, the following statement should be inserted in the specification for clarity and to avoid possible confusion that the lining may be surface treatment --The drawing is lined for color.-- However, lining entire surfaces of a design to show color(s) may interfere with a clear showing of the design as required by **35 U.S.C. 112(a)** (or for applications filed prior to September 16, 2012, **pre-AIA 35 U.S.C. 112**, first paragraph), as surface shading cannot be used simultaneously to define the contours of those surfaces.

- If color photographs or color drawings are filed with the original application, color will be considered an integral part of the disclosed and claimed design. The omission of color in later filed photographs or drawings will be permitted if it is clear from the application that applicant had possession of the underlying configuration of the basic design without the color at the time of filing of the application. See *In re Daniels*, 144 F.3d 1452, 1456-57, 46 USPQ2d 1788, 1790 (Fed. Cir. 1998) and **MPEP § 1503.01**, subsection II. Note also **37 CFR 1.152**, which requires that photographs submitted in lieu of ink drawings in design patent applications must not disclose environmental structure but must be limited to the design claimed for the article.

Color drawings (Emphasized)

- Color drawings are permitted

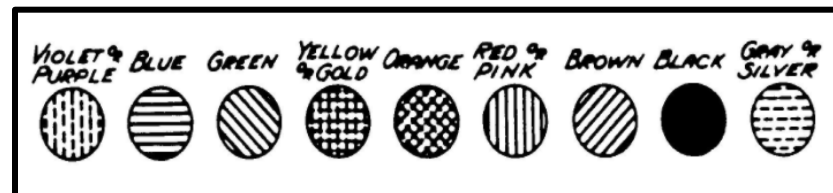
MPEP 1503.02(V) – Color drawings (cont.)

Color drawings are permitted in design applications when filed in accordance with the requirements of **37 CFR 1.84(a)(2)**. Color may also be shown in pen and ink drawings by lining the surfaces of the design for color in accordance with the symbols in MPEP 608.02. If the drawing in an application is lined for color, the following statement should be inserted in the specification for clarity and to avoid possible confusion that the lining may be surface treatment --The drawing is lined for color.-- However, lining entire surfaces of a design to show color(s) may interfere with a clear showing of the design as required by **35 U.S.C. 112(a)** (or for applications filed prior to September 16, 2012, **pre-AIA 35 U.S.C. 112**, first paragraph), as surface shading cannot be used simultaneously to define the contours of those surfaces.

- If color photographs or color drawings are filed with the original application, color will be considered an integral part of the disclosed and claimed design. The omission of color in later filed photographs or drawings will be permitted if it is clear from the application that applicant had possession of the underlying configuration of the basic design without the color at the time of filing of the application. See *In re Daniels*, 144 F.3d 1452, 1456-57, 46 USPQ2d 1788, 1790 (Fed. Cir. 1998) and **MPEP § 1503.01**, subsection II. Note also **37 CFR 1.152**, which requires that photographs submitted in lieu of ink drawings in design patent applications must not disclose environmental structure but must be limited to the design claimed for the article.

Color drawings (Emphasized)

- Color may also be shown by lining the surfaces in accordance with the symbols in MPEP 608.02



MPEP 1503.02(V) – Color drawings (*cont.*)

Color drawings are permitted in design applications when filed in accordance with the requirements of **37 CFR 1.84(a)(2)**. Color may also be shown in pen and ink drawings by lining the surfaces of the design for color in accordance with the symbols in **MPEP § 608.02**. If the drawing in an application is lined for color, the following statement should be inserted in the specification for clarity and to avoid possible confusion that the lining may be surface treatment --The drawing is lined for color.-- However, lining entire surfaces of a design to show color(s) may interfere with a clear showing of the design as required by **35 U.S.C. 112(a)** (or for applications filed prior to September 16, 2012, **pre-AIA 35 U.S.C. 112**, first paragraph), as surface shading cannot be used simultaneously to define the contours of those surfaces.

- If color photographs or color drawings are filed with the original application, color will be considered an integral part of the disclosed and claimed design. The omission of color in later filed photographs or drawings will be permitted if it is clear from the application that applicant had possession of the underlying configuration of the basic design without the color at the time of filing of the application. See *In re Daniels*, 144 F.3d 1452, 1456-57, 46 USPQ2d 1788, 1790 (Fed. Cir. 1998) and **MPEP § 1503.01**, subsection II. Note also **37 CFR 1.152**, which requires that photographs submitted in lieu of ink drawings in design patent applications must not disclose environmental structure but must be limited to the design claimed for the article.

Color drawings (Emphasized)

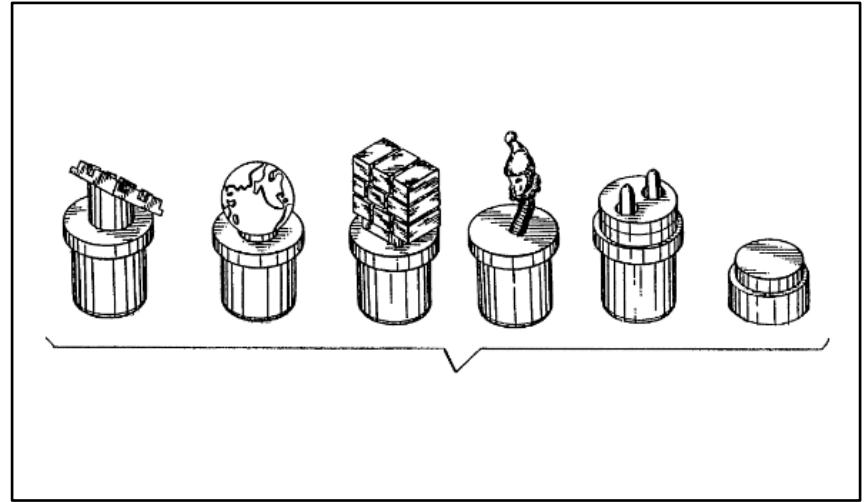
- If the drawing is lined for color, a statement should be inserted into the specification for clarity and to avoid possible confusion that the lining may be surface treatment:

--The drawings are lined for color.--

**MPEP 1504.01(b) Design Comprising
Multiple Articles or Multiple Parts
Embodied in a Single Article**

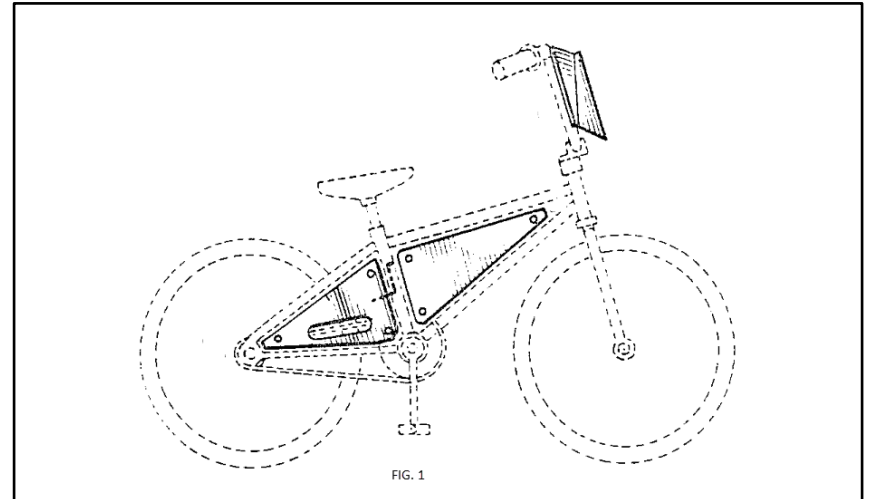
MPEP 1504.01(b) – Multiple Parts in a Single Article

- If the separate parts are shown in a single view, the parts must be shown embraced by a bracket "}".



MPEP 1504.01(b) – Multiple Parts in a Single Article (*cont.*)

- The claim may also involve multiple parts of a single article, where the article is shown in broken lines and various parts are shown in solid lines. In this case, no bracket is needed.





Thank you!

Questions?

