

Patent Drawing Standards and Best Practices

Use this streamlined checklist to ensure your patent illustrations meet official requirements and examiner expectations.

General Requirements

- ☐ Use white, smooth, non-glossy, durable paper (U.S. Letter or A4).
- ☐ Maintain margins: 1" top/sides, 3/8" bottom.
- ☐ All lines must be solid black, sharp, and uniform.
- ☐ Use India ink or high-res digital equivalents.

Line Standards and Visual Conventions

- ☐ Thick lines for visible edges (0.4–0.6 mm).
- ☐ Medium lines for dimensions (≈ 0.3 mm).
- ☐ Thin lines for hatching, centers, hidden edges (≈ 0.2 mm).
- ☐ Use dashed lines for hidden edges.
- ☐ Centerlines: alternating long/short dashes.
- ☐ Break lines: zigzag (metal), wavy (non-metal).
- ☐ Symbols must follow industry standards (e.g., 37 CFR 1.84).

View Selection and Layout

- ☐ Include essential views: front, side, top, rear, isometric.
- ☐ Use exploded views when showing part relationships.
- ☐ Number figures sequentially (e.g., Fig. 1, Fig. 2).
- ☐ Show section cuts with labeled arrows.
- ☐ Keep hatching consistent across views.
- ☐ Avoid scale indicators unless required; preserve accurate proportions.

Reference Characters and Labeling

- ☐ Use plain, legible reference characters; no brackets/parentheses.
- ☐ Maintain consistent labeling across all views.
- ☐ Leader lines must point clearly to features.
- ☐ Text must be at least 0.32 cm (1/8 inch) tall.
- ☐ Keep annotations horizontal and legible.
- ☐ Ensure legibility at 2/3 size reduction.

Section Views and Details

- ☐ Use oblique hatching for cut surfaces.
- ☐ Apply unique hatch patterns per component.
- ☐ Match section indicators to their figures (e.g., Fig. 2A).
- ☐ Label and reference all detail views (e.g., "Detail A").
- ☐ Zoomed views must include readable scale/magnification labels.

Legal Compliance

- ☐ Show all claimed features clearly.
- ☐ Confirm clarity when reduced to 2/3 size.
- ☐ Follow all rules in 37 CFR 1.84 or equivalent.
- ☐ Ensure suitability for reproduction and archiving.

