

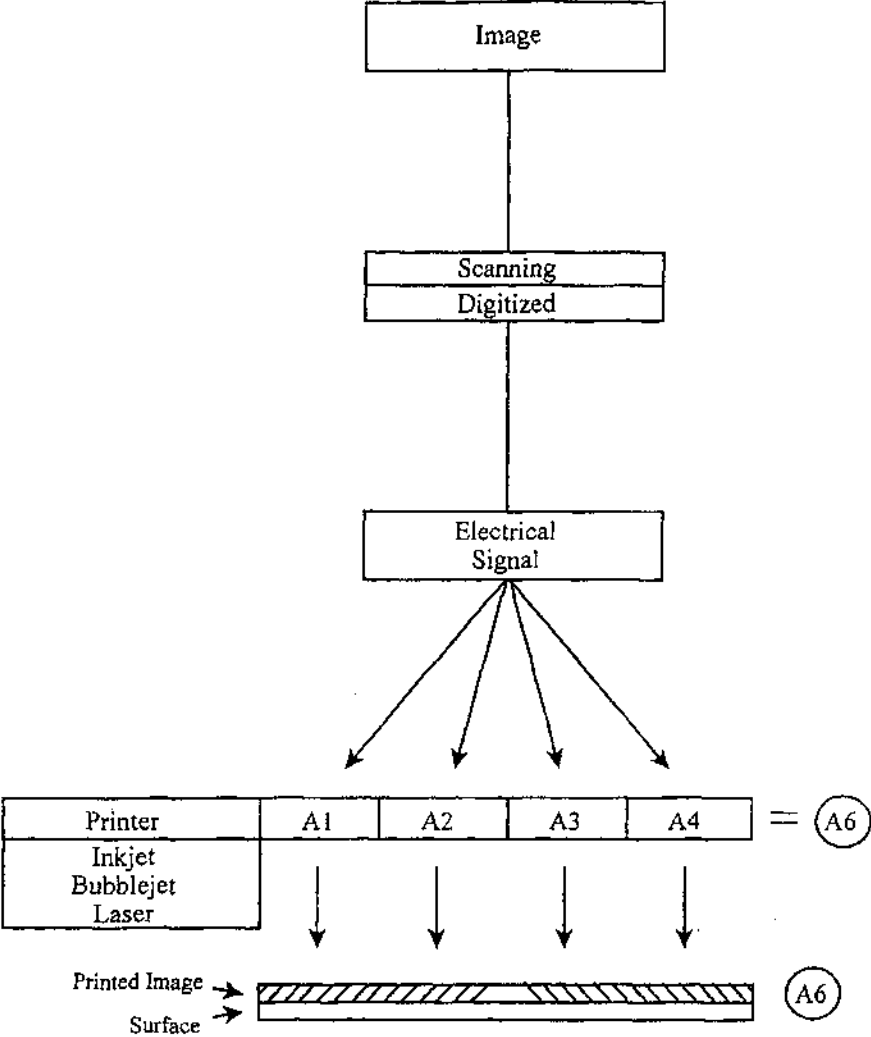


FIG. 1

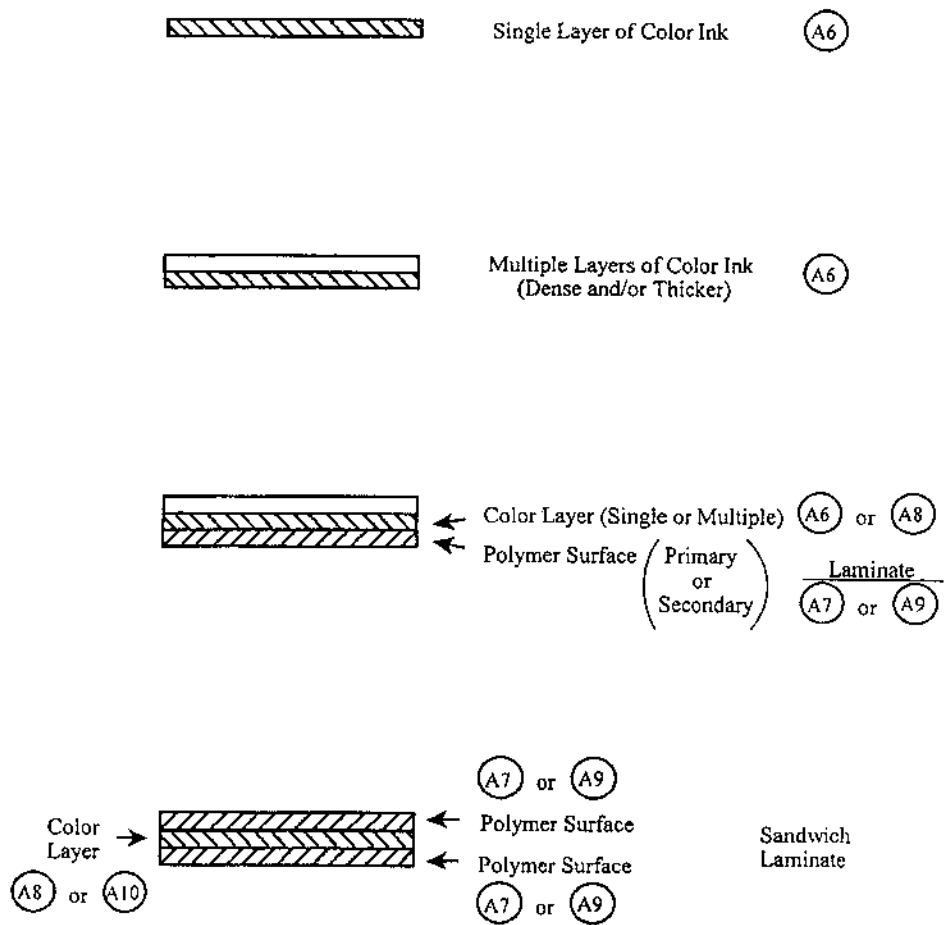


FIG. 2

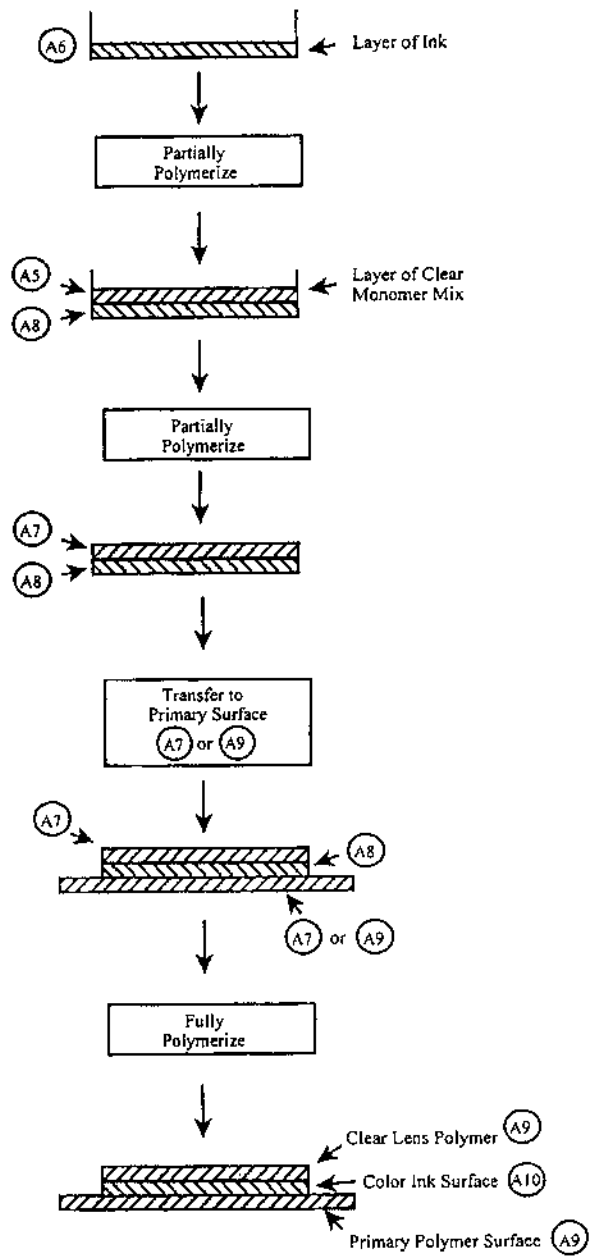


FIG. 3A

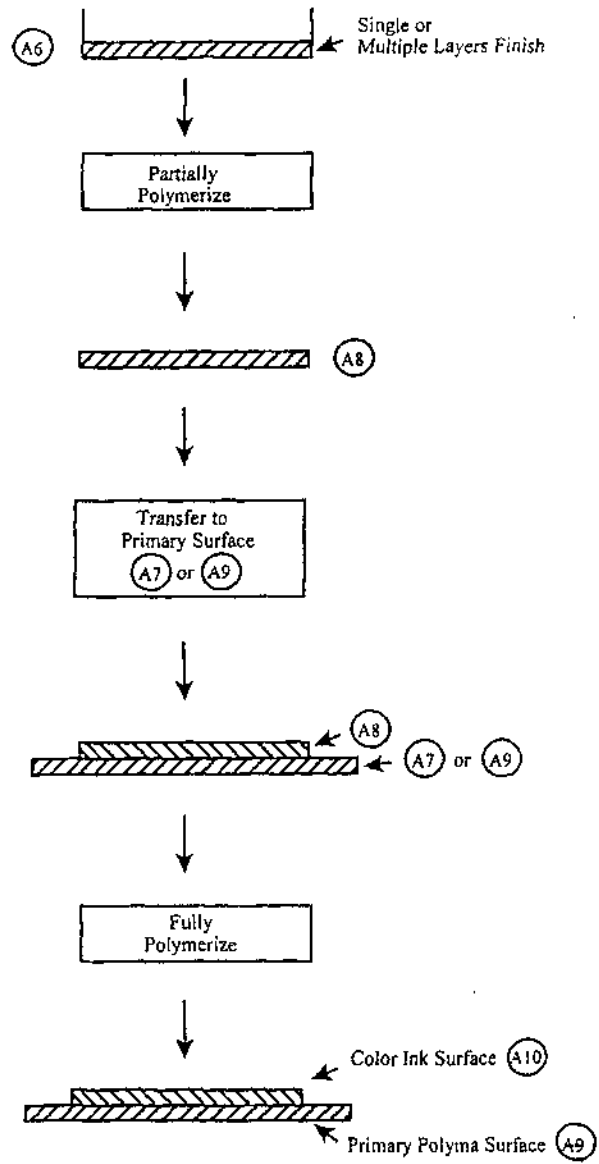


FIG. 3B

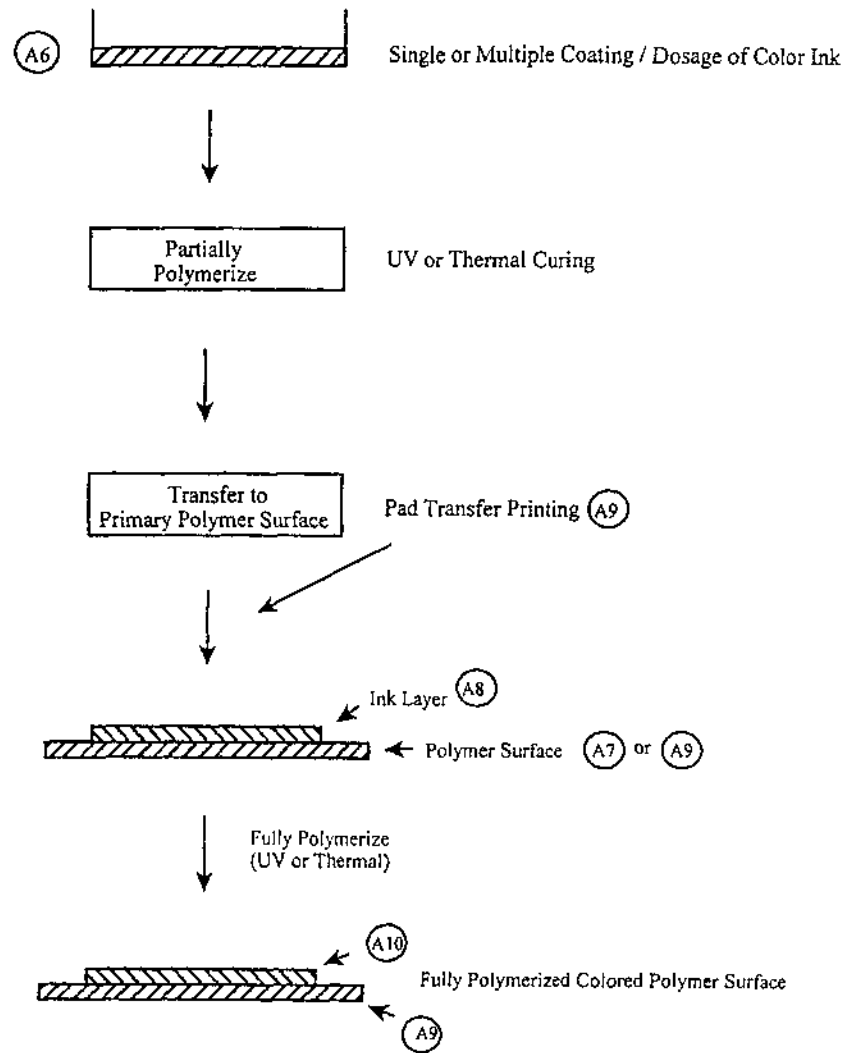
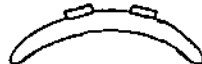


FIG. 4

Lathe/Fabrication

- | | | |
|----|---|---|
| 1 |  | A contact lens (partially or fully polymerized polymer) with completed front curve and back curve. |
| 2A |  | Removal of lens portion, to be printed with digital ink, by cutting, laser removal, grinding. |
| | | or |
| 2B |  | The digital image is formed on top of lens surface 1. |
| 3A |  | Digitally print in the area of "removed" lens portion and filled to the top. |
| | | or |
| 3B |  | Digitally print in the area of "removed" lens portion but filled only partially. |
| 4A | Fully polymerize 3A or 2B. | |
| 4B | or partially polymerize 3B. | |
| 5B |  | Provide a clean monomer layer on the top of the partially filled and partially polymerized digital image area to get laminated image. |
| 6B | Fully polymerize 5B. | |
| 7. | Take 4A or 6B and carry out process steps like polishing, hydration as required to produce soft or hard lens. | |

NOTE: Step 2 can be carried out on front surface or back surface. When back surface is removed the process that provided sandwich 'laminated' structure is preferred, for comfort purpose.

FIG. 5

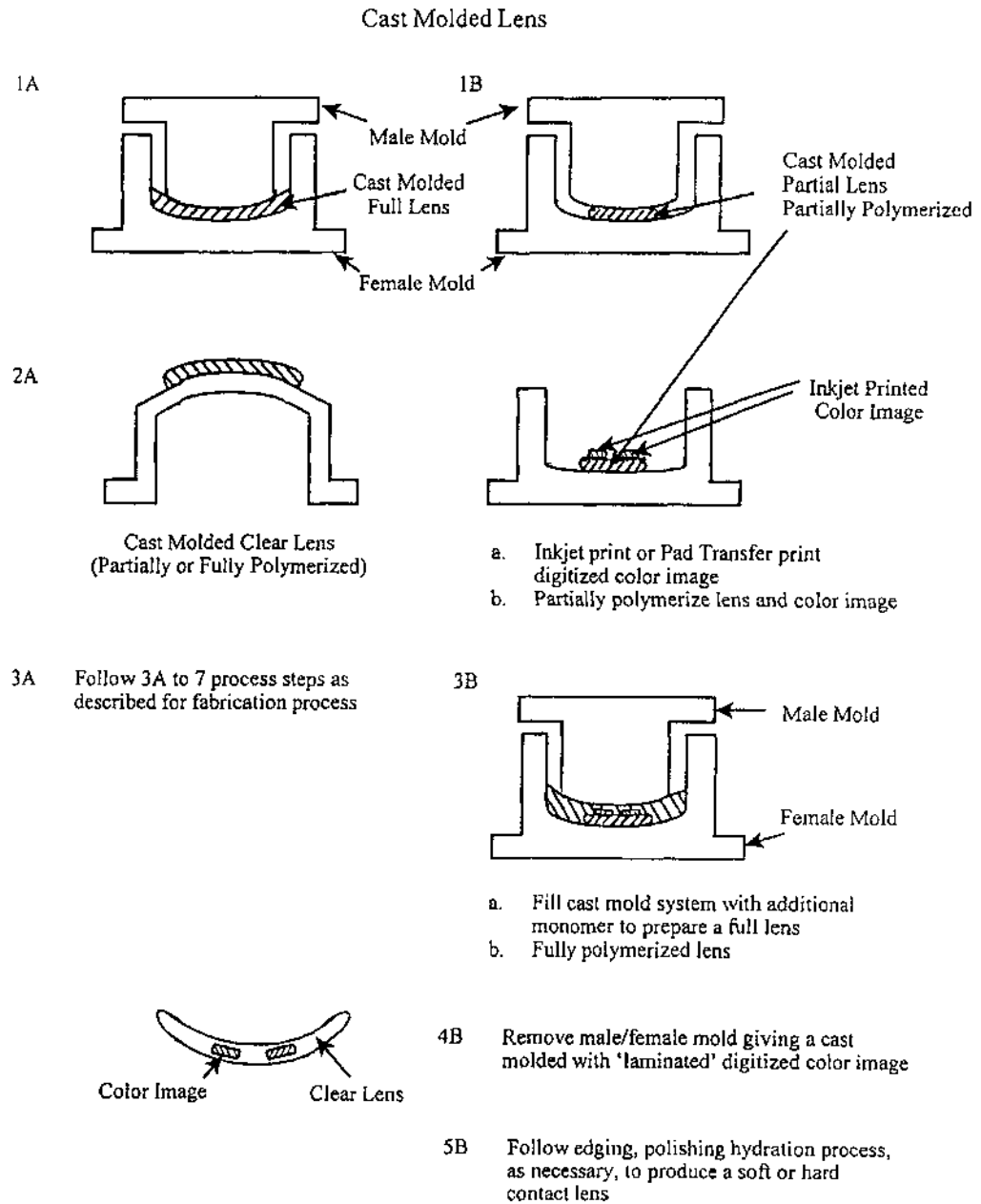


FIG. 6

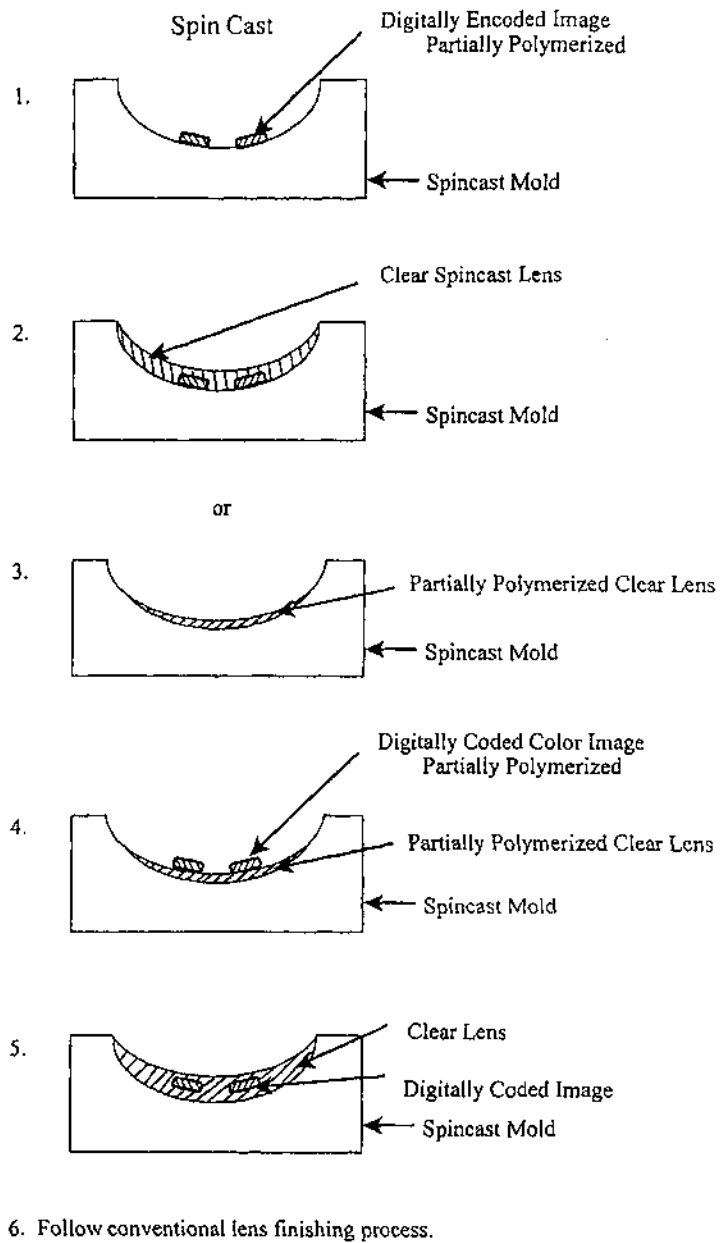
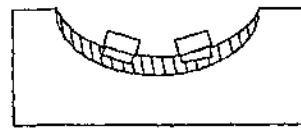


FIG. 7A



Removal of Lens Portion to be Printed with Ink by Cutting, Laser, etc.



Digitally Print in the Area of the Removed Lens Portion and Fill to the Top or Partially



Partially Polymerize



Provide a Clear Monomer Mix; or Partially or Fully Polymerized Digital Image; to be fully polymerized

FIG. 7B



FIG. 8A



FIG. 8B

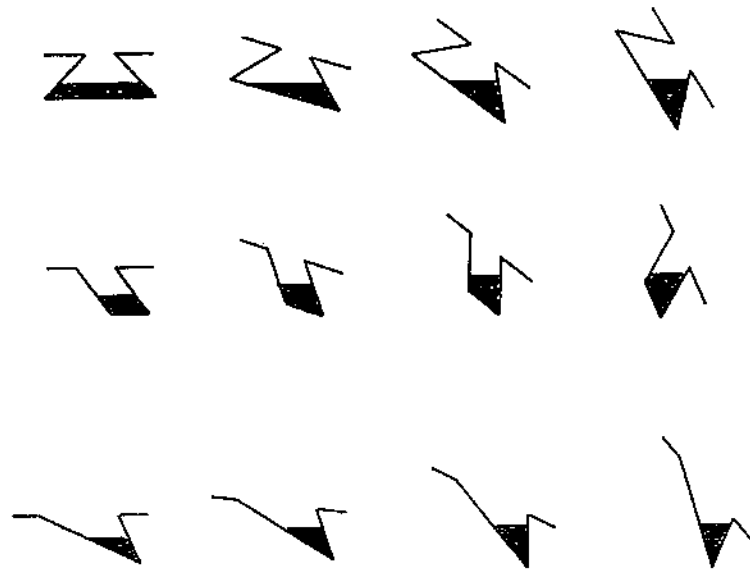


FIG. 9

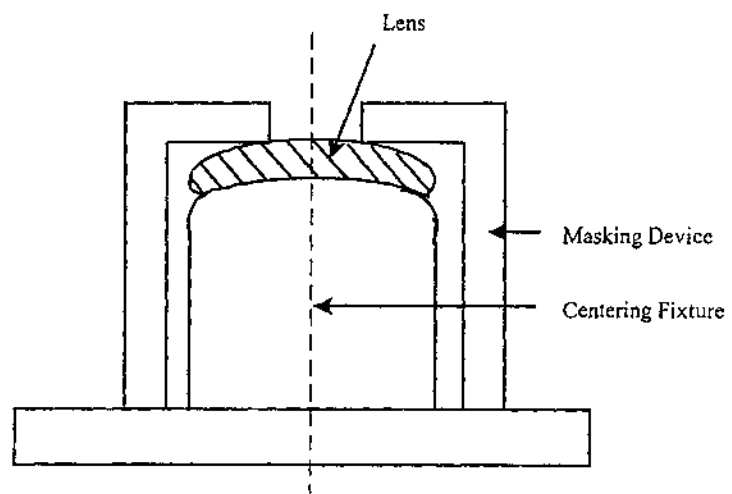


FIG. 10

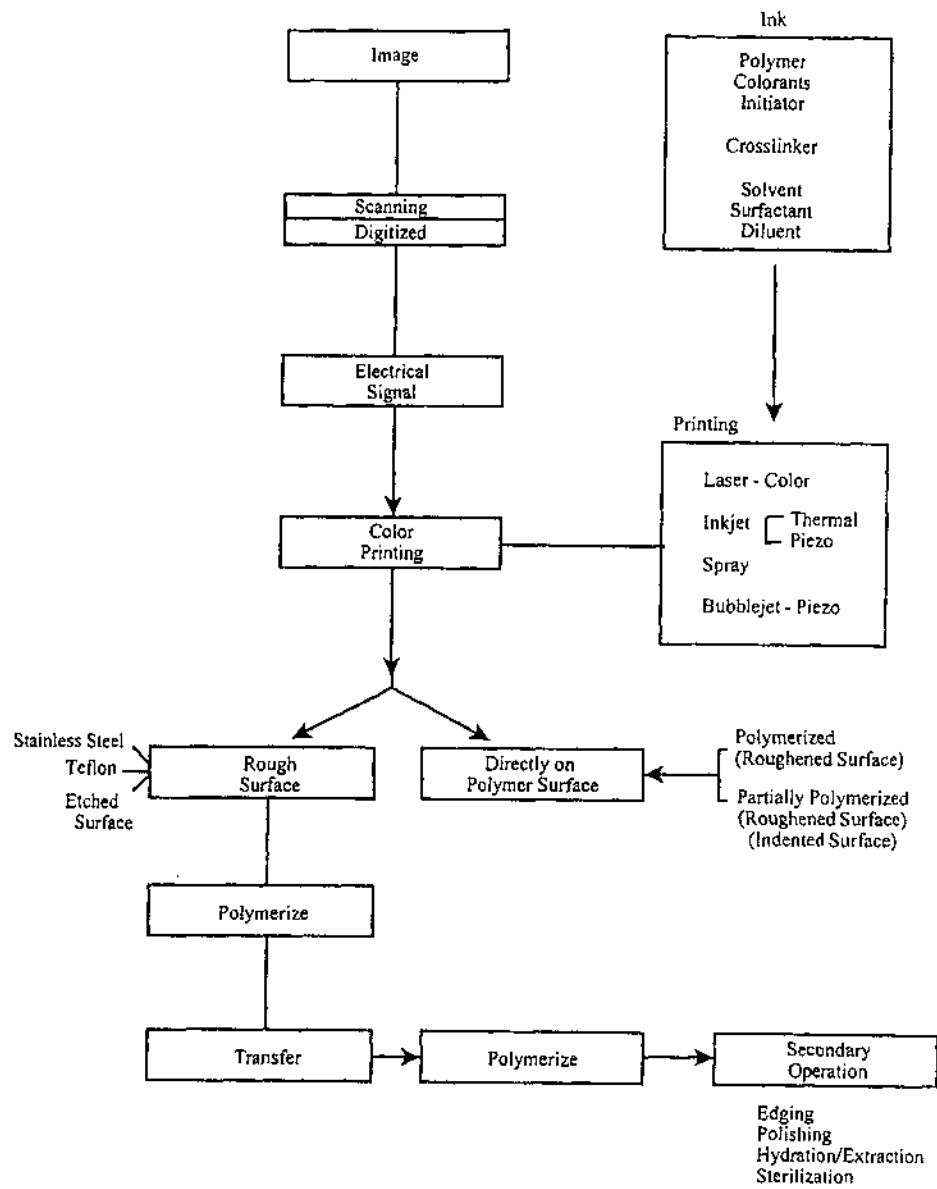


FIG. 11

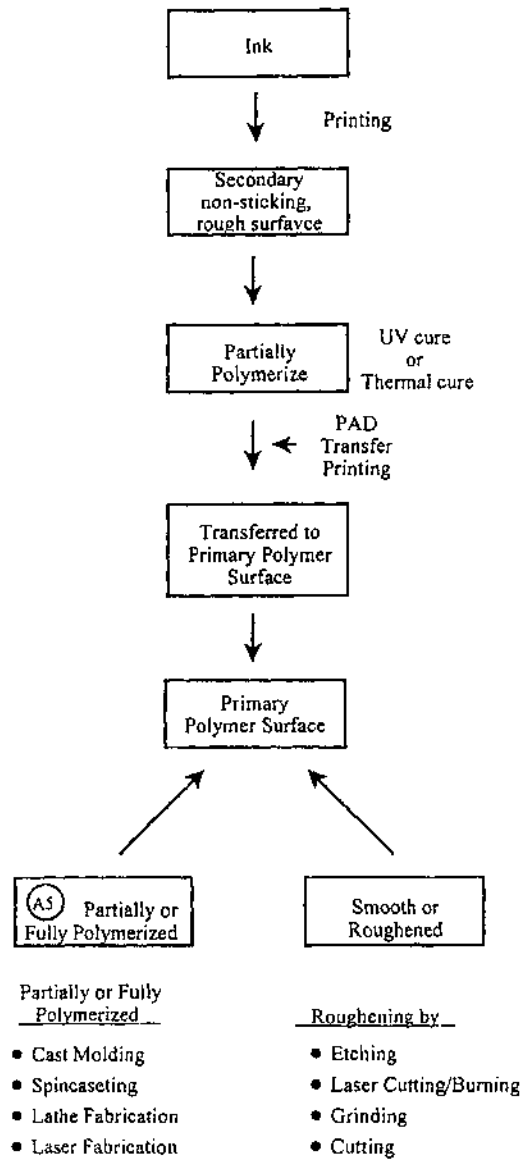


FIG. 12

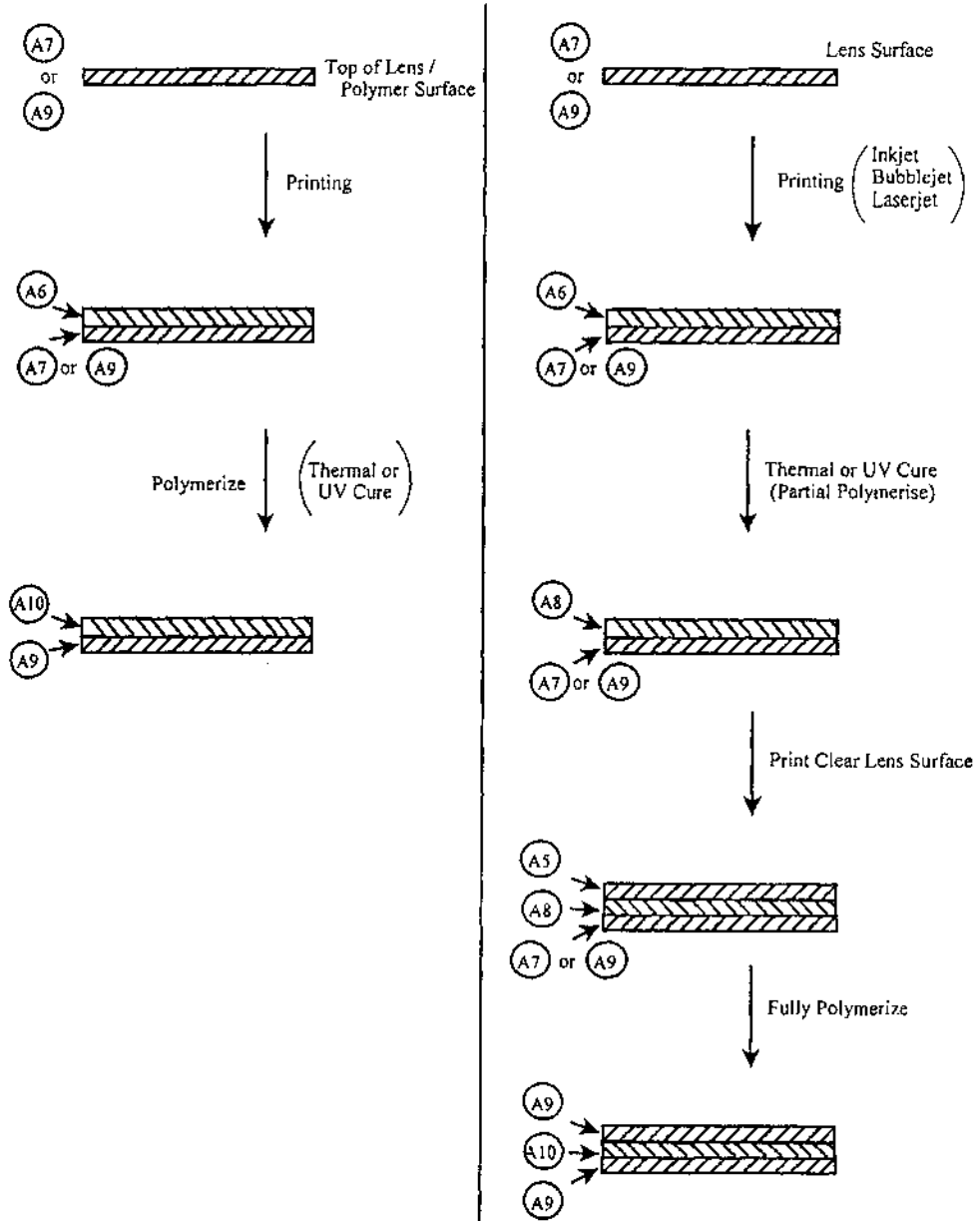


FIG. 13

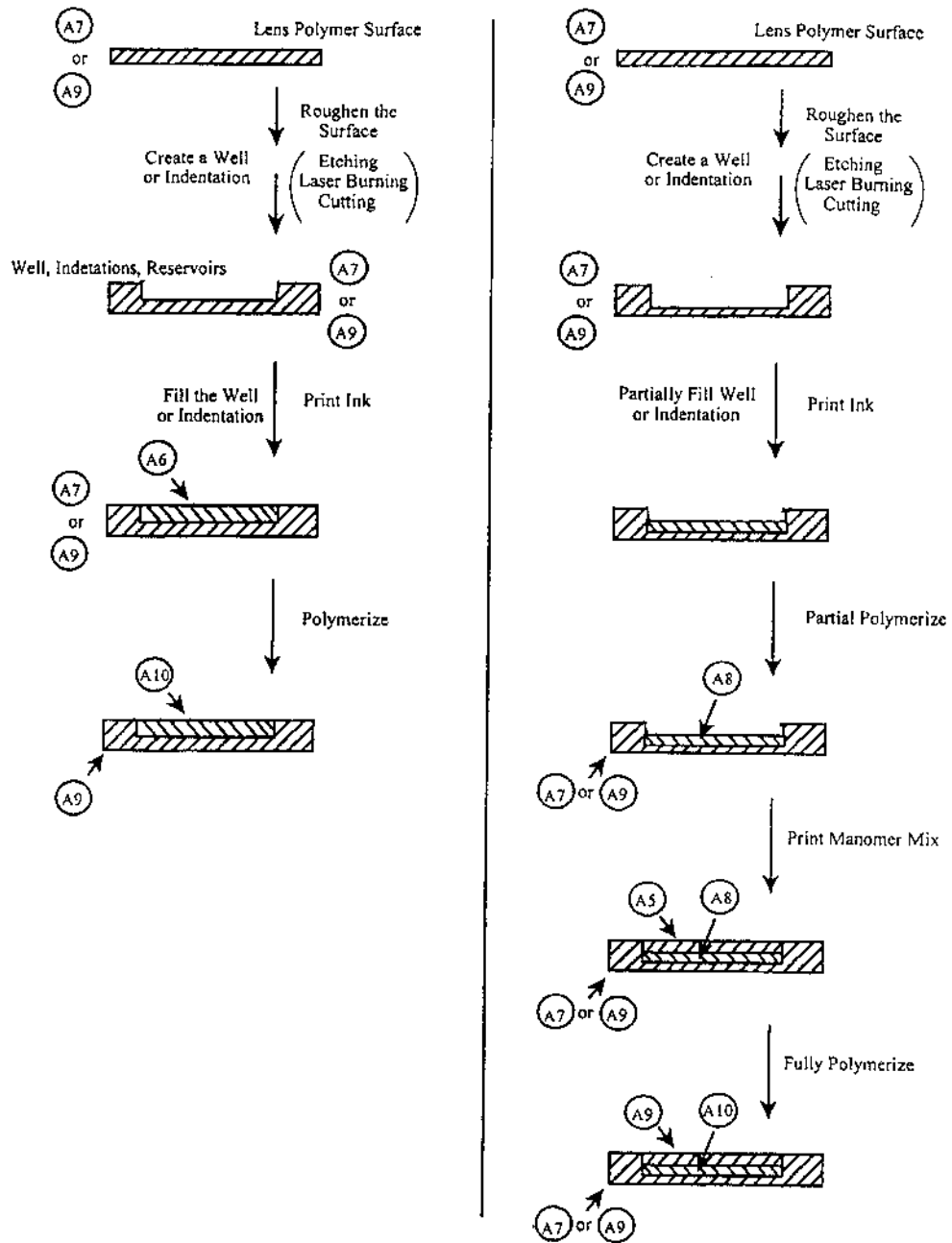


FIG. 14