What is claimed is:

1. A pad printing instrument, comprising: a silicone pad, a printing plate having a flat surface with an image pattern engraved thereon, and an ink supply system, wherein the ink supply system comprises
   (a) an ink cup containing the ink having a first temperature of from ~~about~~ 20ºC to ~~about~~ 30ºC,
   (b) an ink container containing the ink having a second temperature being at least ~~about~~ 3ºC lower than the first temperature and in flow communication with the ink cup,
   (c) a thermostat for maintaining the ink in the ink container at the second temperature,
   (d) a first flow conduit, and
   (e) a second flow conduit, wherein the ink cup comprises
      (i) a cylindrical hollow structure defining an ink reservoir for holding the ink and defining an outer edge, wherein the outer edge having a scraping element thereon for engaging the printing plate,
      (ii) an ink cup inlet,
      (iii) an ink cup outlet, and
      (iv) a stirrer for continuously mixing the ink in the ink cup,

   wherein the first flow conduit extends between the ink container and the ink cup inlet for providing a flow of the ink having the second temperature from the ink container to the ink cup and for maintaining the temperature of the ink in the ink cup at the first temperature, wherein the second flow conduit extends between the ink container and the ink cup outlet for providing a flow of the ink having the first temperature from the ink cup to the ink container.
2. The pad printing instrument of claim 1, wherein the second temperature of the ink in the ink container is maintained at a temperature being ~~about~~ 5ºC or ~~about~~ 10ºC lower than the first temperature of the ink in the ink cup.
3. The pad printing instrument of claim 1 or 2, wherein the scraping element is a rim or lip of the ink cup.
4. The pad printing instrument of any one claims 1 to 3, wherein the cylindrical hollow structure has a diameter of at least ~~about~~ 15 mm and a length of from ~~about~~ 40 mm to ~~about~~ 120 mm.
5. The pad printing instrument of any one of claims 1 to 4, wherein the first flow conduit operates continuously to feed the ink having the second temperature into the ink cup at a flow rate (ml of ink per second) which is equal to or slightly lower than consumption rate of the ink (ml of ink inked to the engraved image pattern per

second), while the second flow conduit operates occasionally on demand to ensure no overflow the ink cup.

6. The pad printing instrument of any one of claims 1 to 5, wherein the first flow conduit and the second flow conduit continuously operates in synchrony with each other to ensure no net increase in ink level in the ink cup.

7. The pad printing instrument of any one of claims 1 to 6, further comprising a cold air blower which blows cold air onto back side of the printing plate to directly or indirectly cool the temperature of the printing plate.

8. A method for producing colored contact lenses, comprising the steps of:

(1) printing a colored image with an ink on a surface of a preformed contact lens by using the pad printing instrument of any one of claims 1 to 7; and

(2) curing the colored image thermally or actinically on the surface of the preformed contact lens to form a colored contact lens with the cured colored image attached thereon.

9. The method of claim 8, further comprising a step of applying a clear coating at least on the surface with the colored image thereon of the colored contact lens to cover completely the colored image.

10. A method for producing colored contact lenses, comprising the steps of:

(1) obtaining a mold which comprises a female mold half having first molding surface and a male mold half having a second molding surface, wherein the male and female mold halves are configured to receive each other such that a lens-forming cavity is formed between the first and second molding surfaces when the mold is closed;

(2) forming, on the first or second molding surface, a colored transferrable polymeric film, wherein the colored transferrable polymeric film is formed by:

(a) applying a layer of a first polymerizable composition onto the first or second molding surface, wherein the first polymerizable composition is free of any pigment particle,

(b) at least partially curing the layer of the first polymerizable composition to form a first polymeric film on the first or second molding surface,

(c) printing a colored image with at least one ink on the first polymeric film on the first or second molding surface by using the pad printing instrument of any one of claims 1 to 7,

(d) curing the colored images on the first polymeric film on the first or second molding surface, and

(e) optionally applying a layer of a second polymerizable composition on top of the first polymeric film to completely cover the cured colored image on the

first polymeric film, wherein the second polymerizable composition is free of any pigment particle and then is curing at least partially to form the second polymeric film which completely covers the cured colored image;

(3) dispensing a lens-forming composition into the lens-forming cavity of the mold; and

(4) curing the lens-forming composition within the lens-forming cavity to form the colored contact lens, whereby the colored transferrable polymeric film detaches from the first or second molding surface and becomes integral with the body of the colored contact lens.

11. The method of claim 10, wherein the colored transferable polymeric firm comprises the first and second polymeric films and the cured colored image encapsulated between the first and second polymeric film.
12. The method of claim 10 or 11, wherein the layers of the first and second polymerizable composition and the colored image are cured actinically by use of a UV/visible radiation, wherein the first and second polymerizable composition and the ink comprise a photoinitiator.
13. The method of any one of claims 10 to 12, wherein the lens-forming composition is cured thermally.
14. The method of any one of claims 10 to 13, wherein the first and second polymerizable compositions and the ink independent of one another comprise an actinically-crosslinkable binder polymer.
15. The method of any one of claims 10 to 14, wherein the ink comprises an organic solvent and at least one vinylic monomer.
16. The method of any one of claims 8 to 15, wherein the colored contact lens is a colored non-silicone hydrogel contact lens.
17. The method of any one of claims 8 to 15, wherein the colored contact lens is a colored silicone hydrogel contact lens.