

5 We claim:

1. A process to create printed heat activated transfers for application to soft goods,
comprising the steps of:

printing onto one side of a hot melt adhesive film to define printed areas and unprinted
areas;

10 transferring the printed hot melt adhesive film to a carrier layer against the print side;

laser-cutting the hot melt adhesive film around the unprinted areas;

removing the laser-cut hot melt adhesive film from the unprinted areas;

2. The process of claim 1, wherein said hot melt adhesive film is on a carrier layer.

3. The process of claim 1, wherein said hot melt adhesive film is a thermoplastic such as

15 polyurethane, polyester, polyamide or polyolefin film.

4. The process of claim 1, wherein said hot melt adhesive film comprises one or more
added components for opacity.

5. The process of claim 4, wherein said one or more added components comprise TiO₂.

6. The process of claim 4, wherein said one or more added components comprise carbon

20 black.

7. The process of claim 1, wherein said hot melt adhesive film includes an adhesion
promoter to improve print quality.

8. The process in claim 1, wherein the hot melt adhesive film is coated with a primer to
improve printability.

25 9. The process in claim 1, wherein the printed hot melt adhesive film is coated with a
protective coating layer to improve washability.

10. The process of claim 1, wherein said carrier paper is a paper substrate coated with a
transfer layer.

- 5 11. The process of claim 1, wherein said carrier paper is a polymer substrate,
12. The process of claim 11, wherein said polymeric substrate is coated with a transfer layer.
13. A heat transfer product made by the process of claim 1 capable of retaining product quality after heat sealing to a garment and undergoing hot wash (60°C) and medium
- 10 dryer conditions for at least fifty washes.
14. A heat transfer product made by the process in claim 1 where the adhesive consists of two layers.
15. The heat transfer product of claim 14 where the first adhesive layer is ink receptive and has a softening point above 110°C.
- 15 16. The heat transfer product of claim 14 where the second adhesive layer has a softening point below 110°C to enable heat sealing to delicate soft goods at lower temperatures.
17. A heat transfer product made by the process in claim 1 where the printed image elastically stretches up to at least about 2%.
18. A heat transfer product made by the process in claim 1 capable of elongating from
- 20 about 2% to about 75% in at least one direction without substantially cracking, speckling, or forming any other substantial defect when the graphic is applied to the clothing article or soft good.
19. A method of manufacturing a thermal transfer, comprising the steps of:
- coating one side of a roll of thermo-plastic adhesive sheet with an ink receptive
- 25 primer;
- digitally printing a graphic image onto the coated side of said thermo-plastic adhesive sheet, said graphic image comprising a plurality of discrete indicia;

- 5 applying a polymeric protective layer over the digitally printed graphic image to produce an intermediate transfer;
- adhering a carrier layer over the polymeric protective layer to produce an uncut final transfer;
- kiss-cutting partially through the uncut final transfer according to a kiss-cut pattern;
- 10 through-cutting fully through the uncut final transfer according to a through-cut pattern to produce a cut final transfer; and
- weeding out waste sections of the cut final transfer.
20. A heat transfer product, comprising:
- a dual-layer adhesive layer further comprising a first adhesive layer that is ink
- 15 receptive and has a softening point above 110°C, and a second adhesive layer having a softening point below 110°C;
- a printed image printed on the first adhesive layer of said dual-layer adhesive layer and configured to define one or more graphic images and/or text;
- a protective layer comprising a polymeric coating over the printed image; and
- 20 a carrier paper adhered by a release liner to the protective layer.