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CLAIMS

1. A method of printing on opposite surfaces of a layer on a multi-layered foil laminate, wherein said layer comprises a plastic film material having a first of said surfaces adhesively fastenable to a facing surface of a foil web; said method comprising the steps of:

(a) imprinting a first indica on said first surface of said plastic film material through lithographic printing;

(b) adhesively fastening said imprinted first surface of said plastic film material layer to the facing surface of said foil web;

(c) and imprinting ^{second} indica on a second surface of said plastic film material remote from said foil web through thermal transfer printing.

2. A method of printing as claimed in claim 1, wherein said plastic film material is adhesively secured to said foil through the interposition of a layer consisting of a dry bond adhesive.

3. A composite laminated foil covering and printed label structure for a package, said foil covering and label structure comprising:

(a) a metallic foil;

(b) a first layer constituted of a plastic film material adhesively secured to one side of said foil, said first layer having indicia imprinted on the surface thereof facing said foil, and thermally transferred indicia being printed on an opposite side of said layer remote from said foil, whereby said double-side printing forms a printed label.

4. A composite laminated foil package covering as claimed in claim 3, wherein said first layer is at least translucent, said printing on the surface thereof facing said foil being imprinted by lithographic halftone and being visible in a desired orientation upon viewing thereof from the exterior of said laminate.



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5. A composite laminated foil package covering as claimed in claim 4, wherein an opaque color background is printed on the surface of said layer facing said foil beneath said imprinted indicia.

6. A composite laminated foil package covering as claimed in any one of claims 3 to 5, wherein said plastic film material layer is adhesively bonded to said metallic foil through the interposition of a dry bond adhesive layer.

7. A composite laminated foil package covering as claimed in any one of claims 3 to 6, wherein a second plastic film material layer is adhesively secured to the side of the metallic foil opposite the side having said first layer secured thereto.

8. A composite laminated foil package covering as claimed in claim 7, wherein said second plastic film material layer is heat sealable to a shaped package constituted of an injection-molded plastic material.

9. A method of producing multi-layered foil laminate coverings for a packaging, said coverings each embodying a label having printing on opposite surfaces of an outer layer on web of said laminate, wherein said layer comprises a plastic film material having a first of said surfaces adhesively securable to a facing surface of said foil web; said method comprising the steps of:

(a) imprinting indicia on said first surface of said plastic film material through lithographic halftone printing;

(b) adhesively securing said imprinted first surface of said plastic film material layer to the facing surface of said foil web;

(c) imprinting indicia on a second surface of said plastic film material remote from said foil web through thermal transfer printing;

(d) applying a layer constituted of a lacquer composition to the opposite surfaces of said foil web;

(e) coating a layer of a dry bond adhesive on said

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lacquer layer;

(f) bonding a further layer comprising a plastic film material on said adhesive to form said multi-layered foil laminate; and

(g) severing said laminated foil web into predetermined segments each having said printing located therein in specified surface regions so as to form said package coverings.

10. A method as claimed in claim 9, wherein said plastic film material is at least translucent, said halftone printing step comprising printing said indicia in at least one color on said first layer surface so as to render said indicia visible in a desired orientation thereof upon viewing said second surface from the exterior of said laminate.

11. A method as claimed in claim 10, wherein an opaque contrastingly colored background is printed on said first surface beneath said printed indicia.

12. A method as claimed in claim 9, wherein said thermal transfer printing step on said second surface of the plastic film material has the indicia remaining stable upon being exposed to temperatures within the range of about 120°C to 130°C over periods of about 30 minutes.

13. A method as claimed in claim 9, wherein printing registration is controlled by at least one optical sensor scanning at least one of said print fields.

14. A method as claimed in claim 9, wherein indicia imparted by thermal transfer printing to the second surface of said first plastic film material layer are located in specified orientations over the print fields present on the surface of said first plastic film material layer.

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METHOD OF DOUBLE-SIDED PRINTING OF A LAMINATE AND PRODUCTOBTAINED THEREBYABSTRACT OF THE DISCLOSURE

A method of double-sided printing, in effect, on opposite or both surfaces of a layer on a multi-layered foil laminate. Moreover, also disclosed is the provision of a novel multi-layered foil laminate having at least one layer, preferably an exterior layer which is constituted of a plastic film material, and which is provided with printing on both surfaces of the layer. In essence, the inventive method of double-sided printing includes initially printing on a first side of an outer layer of a plastic film material, preferably such as polyester, wherein the printing is imparted to the side or surface of the plastic film material facing towards an underlying metallic foil to which it is to be adhered, and wherein the printing is applied to the plastic film material through the intermediary of reverse halftone color printing, whereby subsequent this particular printing on the one side of the outer plastic film layer having been completed, the plastic film material is adhesively fastened at the printed surface thereof to the underlying metallic foil, such as through the interposition of a suitable adhesive. Thereafter, in order to effectuate the printing on the opposite or external surface of the outer plastic film material, the laminated foil has thermal transfer printing imparted to the outer surface of the plastic film layer, preferably through the intermediary of a ceramic printing head, imparting further indicia indicative of specific information relative to the contents of a package which is to be equipped with the foil laminate.

FIGURE 1 SHOULD ACCOMPANY THE ABSTRACT WHEN PUBLISHED