RESERVE COPY.

PATENT SPECIFICATION

NO DRAWINGS

10



917,176

Date of filing Complete Specification May 1, 1961.

Application Date May 26, 1960. *No. 18669/60.*

Complete Specification Published Jan. 30, 1963.

Index at acceptance:—Class 100(2), CA(13:25).

International Classification:—B41f.

COMPLETE SPECIFICATION

A Process Producing an Imitation Watermark in Paper or Waterleaf or the like

I, IAN MACKENZIE LIVINGSTONE, 5 Lymington Mansions, Lymington Road, London, N.W.6, formerly of 71, Onslow Road, Richmond, Surrey, British, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The usual method of producing a watermark is by impressing the desired design on the fibres of the paper while the fibres are in a wet state during the process of manufacture. The pressure is effected by the design on a dandy roll or press roll and the mark of this pressure appears on the finished paper more translucent than the surrounding paper.

A watermark can at present be applied only to large quantities of paper owing to the difficulties presented by interruptions of the paper-making process and users of relatively small quantities are denied the possibility of a watermark of their own design.

Various attempts have been made to simulate a watermark by processes applied to paper after manufacture but they have failed owing to the impermanence of the effect or to spoiling of the paper.

The present invention is a process by which a permanent watermarked effect is obtained by the deposit in the fibres of the paper after manufacture of a colourless substance rendering the paper translucent.

The effect is obtained by depositing by ordi[illegible] pr[illegible] proc[illegible]s on paper a liqui[illegible] thetic resin or resin in an organic solvent, which may be a hydrocarbon solvent.

The solvent evaporates during the printing process having carried and deposited the synthetic resin or resin within the paper. The proportions to be used in preparing the solution depend on the water marked effect desired but will usually be in the ratio of one part synthetic resin or resin to between three and ten parts solvent.

EXAMPLE

In one part of white spirit (British Standard Specification No. 245) dissolve 5 ounces of colourless synthetic resin (cyclohexanone type).

These fluids can be used as ink in a printing machine suitable for inks of these viscosities and penetrate into the fibres of the paper. The result is a translucent effect in the paper similar to a watermark.

WHAT I CLAIM IS:—

1. A process producing an initiation watermark which comprises printing on already manufactured, dried and finished paper a watermark design with a fluid essentially consisting of a synthetic resin, or resin dissolved in a volatile solvent thereby leaving a translucent design in the paper aft[illegible] he solvent has evaporated.

2. A process of Claim [illegible] herein the synthetic resin is of a cyclohex[illegible] type.

3. A process of Claim [illegible] wherein hydrocarbon solven[illegible] are used.

4. P[illegible] described in Claim

IAN [illegible]VINGSTONE.

Leamington Spa: Printed for Her Majesty's Stationery Office by the Courier Press.—1963.
Published at The Patent Office, 25, Southampton Buildings, London, W.C.2, from which copies may be obtained.

[*Price 4s. 6d.*]

Price 5s. 0d.

Price 25p

RESERVE COPY.

PATENT SPECIFICATION

NO DRAWINGS

10



917,176

Date of filing Complete Specification May 1, 1961.

Application Date May 26, 1960. *No. 18669/60.*

Complete Specification Published Jan. 30, 1963.

Index at acceptance:—Class 100(2), CA(13:25).

International Classification:—B41f.

COMPLETE SPECIFICATION

A Process Producing an Imitation Watermark in Paper or Waterleaf or the like

I, IAN MACKENZIE LIVINGSTONE, 5 Lymington Mansions, Lymington Road, London, N.W.6, formerly of 71, Onslow Road, Richmond, Surrey, British, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The usual method of producing a watermark is by impressing the desired design on the fibres of the paper while the fibres are in a wet state during the process of manufacture. The pressure is effected by the design on a dandy roll or press roll and the mark of this pressure appears on the finished paper more translucent than the surrounding paper.

A watermark can at present be applied only to large quantities of paper owing to the difficulties presented by interruptions of the paper-making process and users of relatively small quantities are denied the possibility of a watermark of their own design.

Various attempts have been made to simulate a watermark by processes applied to paper after manufacture but they have failed owing to the impermanence of the effect or to spoiling of the paper.

The present invention is a process by which a permanent watermarked effect is obtained by the deposit in the fibres of the paper after manufacture of a colourless substance rendering the paper translucent.

The effect is obtained by depositing by ordinary printing processes on paper a liquid synthetic resin or resin in an organic solvent, which may be a hydrocarbon solvent.

The solvent evaporates during the printing process having carried and deposited the synthetic resin or resin within the paper. The proportions to be used in preparing the solution depend on the water marked effect desired but will usually be in the ratio of one part synthetic resin or resin to between three and ten parts solvent.

EXAMPLE

In one part of white spirit (British Standard Specification No. 245) dissolve 5 ounces of colourless synthetic resin (cyclohexanone type).

These fluids can be used as ink in a printing machine suitable for inks of these viscosities and penetrate into the fibres of the paper. The result is a translucent effect in the paper similar to a watermark.

WHAT I CLAIM IS:—

1. A process producing an initiation watermark which comprises printing on already manufactured, dried and finished paper a watermark design with a fluid essentially consisting of a synthetic resin, or resin dissolved in a volatile solvent thereby leaving a translucent design in the paper after the solvent has evaporated.

2. A process of Claim 1 wherein the synthetic resin is of a cyclohexanone type.

3. A process of Claim 1 wherein hydrocarbon solvents are used.

4. A process as described in Claim

IAN MACKENZIE LIVINGSTONE.

Leamington Spa: Printed for Her Majesty's Stationery Office by the Courier Press.—1963.
Published at The Patent Office, 25, Southampton Buildings, London, W.C.2, from which copies may be obtained.

[*Price* 4s. 6d.]

Price 5s. 0d.



Price 25p