Claims

1. A method for manufacturing an inkjet-printed substrate comprising the following steps:

a) providing a substrate, wherein the substrate comprises on at least one side a coating layer comprising a salifiable alkaline or alkaline earth compound,

b) providing a liquid treatment composition comprising an acid,

c) providing an ink,

d) depositing the liquid treatment composition onto the coating layer by inkjet printing to form a first pattern, and

e) depositing the ink onto the coating layer by inkjet printing to form a second pattern,

wherein the liquid treatment composition and the ink are deposited simultaneously and the first pattern and the second pattern overlap at least partially, and

wherein the liquid treatment composition of step b) and the ink of step c) are provided together in form of an inkjet formulation.

2. The method of claim 1, wherein the first pattern and the second pattern overlap by at least 50 %, preferably at least 75 %, more preferably at least 90 %, even more preferably at least 95 %, and most preferably at least 99 %.

3. The method of any one of the preceding claims, wherein the substrate of step a) is prepared by

i) providing a substrate,

ii) applying a coating composition comprising a salifiable alkaline or alkaline earth compound on at least one side of the substrate to form a coating layer, and

iii) drying the coating layer.

4. The method of any one of the preceding claims, wherein the substrate of step a) is selected from the group consisting of paper, cardboard, containerboard, plastic, non-wovens, cellophane, textile, wood, metal, glass, mica plate, marble, calcite, nitrocellulose, natural stone, composite stone, brick, concrete, and laminates or composites thereof, preferably paper, cardboard, containerboard, or plastic.

5. The method of any one of the preceding claims, wherein the salifiable alkaline or alkaline earth compound is an alkaline or alkaline earth oxide, an alkaline or alkaline earth hydroxide, an alkaline or alkaline earth alkoxide, an alkaline or alkaline earth methylcarbonate, an alkaline or alkaline earth hydroxycarbonate, an alkaline or alkaline earth bicarbonate, an alkaline or alkaline earth carbonate, or a mixtures thereof, preferably the salifiable alkaline or alkaline earth compound is an alkaline or alkaline earth carbonate being preferably selected from lithium carbonate, sodium carbonate, potassium carbonate, magnesium carbonate, calcium magnesium carbonate, calcium carbonate, or mixtures thereof, more preferably the salifiable alkaline or alkaline earth compound is calcium carbonate, and most preferably the salifiable alkaline or alkaline earth compound is a ground calcium carbonate, a precipitated calcium carbonate and/or a surface-treated calcium carbonate.

6. The method of any one of the preceding claims, wherein the salifiable alkaline or alkaline earth compound is in form of particles having a weight median particle size d_{50} from 15 nm to 200 µm, preferably from 20 nm to 100 µm, more preferably from 50 nm to 50 µm, and most preferably from 100 nm to 2 µm.

7. The method of any one of the preceding claims, wherein the acid is selected from the group consisting of hydrochloric acid, sulphuric acid, sulphurous acid, phosphoric acid, citric acid, oxalic acid, acetic acid, formic acid, sulphamic acid, tartaric acid, phytic acid, boric acid, succinic acid, suberic acid, benzoic acid, adipic acid, pimelic acid, azelaic acid, sebaic acid, isocitric acid, aconitic acid, propane-1,2,3-tricarboxylic acid, trimesic acid, glycolic acid, lactic acid, mandelic acid, acidic organosulfur compounds, acidic organophosphorus compounds, and mixtures thereof, preferably the acid is selected from the group consisting of hydrochloric acid, sulphuric acid, sulphurous acid, phosphoric acid, oxalic acid, boric acid, suberic acid, succinic acid, sulphamic acid, tartaric acid, and mixtures thereof, more preferably the acid is selected from the group consisting of sulphuric acid, phosphoric acid, boric acid, suberic acid, sulphamic acid, tartaric acid, and mixtures thereof, and most preferably the acid is phosphoric acid and/or sulphuric acid.

8. The method of any one of the preceding claims, wherein the liquid treatment composition comprises the acid in an amount from 0.1 to 100 wt.-%, based on the total weight of the liquid treatment composition, preferably in an amount from 1 to 80 wt.-%, more preferably in an amount from 5 to 60 wt.-%, and most preferably in an amount from 10 to 50 wt.-%.

9. The method of any one of the preceding claims, wherein the liquid treatment composition is deposited onto the coating layer in form of an one-dimensional bar code, a two-dimensional bar code, a three-dimensional bar code, a security mark, a number, a letter, an alphanumerical symbol, a text, a logo, an image, a shape, or a design.

10. An inkjet-printed substrate obtainable by the method according to any one of claims 1 to 9.

11. Use of the inkjet-printed substrate according to claim 10 in packaging applications, in decorative applications, in artistic applications, or in visual applications, preferably as wall paper, packaging, gift wrap paper, advertisement paper or poster, business card, manual, warranty sheet or card.