

Title (en)

PROCESS FOR PRINTING PARTICLES

Title (de)

VERFAHREN ZUM BEDRUCKEN VON PARTIKELN

Title (fr)

PROCÉDÉ PERMETTANT D'IMPRIMER DES PARTICULES

Publication

EP 4228902 A1 20230823 (EN)

Application

EP 21787395 A 20211005

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- EP 20202642 A 20201019
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Abstract (en)

[origin: WO2022084027A1] :The invention relates to a process for printing onto a substrate having an image-receiving surface, which comprises providing a donor surface, passing the donor surface through a coating station from which the donor surface exits coated with individual particles, and repeatedly performing the steps of: (i) providing a receptive layer, at least partially covering said image-receiving surface, (ii) treating the receptive layer by electromagnetic radiation in order to enhance its affinity to the particles greater than the affinity of the particles to the donor surface, (iii) contacting the receptive layer with the donor surface to cause particles to transfer from the donor surface to the treated receptive layer, thereby exposing regions of the donor surface from which particles are transferred to the receptive layer and thereby generating a plurality of individual particles adhered to the receptive layer; and (iv) returning the donor surface to the coating station to coat it again with individual particles in order to permit printing of a subsequent image on the substrate, characterized in that the receptive layer provided in step (i) contains or consists of a coating composition RC comprising 10 - 95 wt.-% of a multifunctional acrylate MA with 2 – 16 acryloyl groups and additionally at least a sufficient number of further moieties selected from the group consisting of urethane functions, ester functions and ether functions, with the proviso that the sufficient number is such that in total at least 6 – 90 moiety-heteroatoms are provided, and with optionally a limited number of phenyl groups, where said number is limited by the proviso that there are at least 6 of the moiety-heteroatoms per one phenyl group.

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