Title (en)

Process for making a pattern on the surface of a substrate

Title (de)

Verfahren zum Aufbringen eines Musters auf eine Oberfläche eines Trägers

Title (fr)

Procédé pour faire un dessin sur la surface d'un substrat

Publication

EP 0950438 A1 19991020 (DE)

Application

EP 98105042 A 19980319

Priority

EP 98105042 A 19980319

Abstract (en)

Channels (D1, D2, ...) forming rows of the pattern (M1, M2, ...) are offset transversely. Using some channels at least, rows can be deposited to obtain a complete pattern. In this pattern, rows lying side by side are deposited by differing channels. These adjacent rows optionally intermix. Preferred features: Channels are mutually offset by the row spacing (aR) of the pattern, or by a multiple of it. The maximum offset is that between the first and the last channel (D1, Dn) in the direction of movement. The channels are displaced together, each by the same distance (advance V). Displacement (V) preferably equals the product of pattern row spacing (aR) and a number (nK) of channels. Rows of the pattern are deposited with channels over the entire pattern surface. Rows are deposited on a circular cylindrical surface in the circumferential direction, with longitudinal common channel offsets. Channels may be held during deposition of rows, the channels being moved on before depositing the next group of rows. During deposition of a row or a group of rows, the channels are displaced continuously by the spacing (advance (V). The pattern is applied by one or more of the following: laser light illumination of a photosensitive layer; removing a layer of the substrate by laser light; spraying a covering fluid from nozzles; spraying opaque fluid onto a photosensitive layer; or spraying insulant onto a penetrating conductive surface. The substrate is a screen sprayed with covering fluid. Following drying and/or hardening both mechanically and chemically printing inks are resisted.

Abstract (de)

Die Erfindung betrifft ein Verfahren zum Aufbringen eines Musters auf eine Oberfläche eines Trägers (10), bei dem mit wenigstens zwei Ausgabekanälen (D1, D2, ...) zueinander parallele Musterreihen (M1, M2, ...) aufgebracht werden. Um ein Muster ohne streifenförmig sichtbare Fehler zu erzeugen ist vorgesehen, daß die Ausgabekanäle (D1, D2, ...) quer zu den Musterreihen (M1, M2 ...) jeweils so verschoben werden, daß zumindest mit einem Teil der Ausgabekanäle (D1, D2, ...) wahlweise Musterreihen (M1, M2, ...) aufgebracht werden können, um ein vollständiges Muster zu erhalten, bei dem die einzelnen mit unterschiedlichen Ausgabekanälen (D1, D2, ...) aufgebrachten Musterreihen (M1, M2, ...) wahlweise nebeneinanderliegend miteinander vermischt sind. <IMAGE>

IPC 1-7

B05D 5/06

IPC 8 full level

B05D 1/00 (2006.01); **B05D 1/26** (2006.01); **B05D 5/06** (2006.01)

CPC (source: EP US)

B05D 1/002 (2013.01 - EP US); **B05D 1/26** (2013.01 - EP US); **B05D 5/06** (2013.01 - EP US)

Citation (search report)

- [X] BE 422560 A
- [X] EP 0765694 A1 19970402 - DAINIPPON PRINTING CO LTD [JP]
- [X] US 5662968 A 19970902 - YAMAGUCHI TAKAHIRO [JP]
- [A] FR 2641717 A1 19900720 - NAVARRA COMPONENTES ELECTRONIC [ES]
- [A] EP 0056704 A2 19820728 - ALCAN INT LTD [CA]
- [A] CH 687742 A5 19970214 - LONZA AG GAMPEL WALLIS GESCHOF [CH]
- [A] GB 2282771 A 19950419 - FUJI ELECTRIC CO LTD [JP]
- [A] US 5707689 A 19980113 - HORI SHINGO [JP]
- [A] DE 2804539 A1 19790816 - PUSCH GUENTER

Designated contracting state (EPC)

AT CH DE ES FR GB IT LI NL

DOCDB simple family (publication)

EP 0950438 A1 19991020; US 6083571 A 20000704

DOCDB simple family (application)

EP 98105042 A 19980319; US 27225499 A 19990319