

Title (en)

Photo-electrostatic method for glaze-decorating ceramic tiles, machine therefor, and end product obtained therefrom.

Title (de)

Photo-elektrostatisches Verfahren und Vorrichtung zum Glasieren keramischer Fliesen und Fertigfabrikat hiermit erzeugt.

Title (fr)

Procédé et dispositif photo-électrostatique pour décorer des carreaux en céramique et produit ainsi obtenu.

Publication

EP 0097134 A1 19831228 (EN)

Application

EP 83830121 A 19830614

Priority

- IT 4005283 A 19830527
- IT 4007482 A 19820615

Abstract (en)

The method disclosed is one of transferring the image from a transparency (13 or 111) - this either caused to reciprocate through a horizontal and longitudinal path, or revolve continuously - onto a tile (2) travelling below, synchronised in its movement with that of the transparency; provision being made between transparency and tile for a conductive rotating cylinder (46) having a selenium outer surface (48), which, in conjunction with a lamp (15 or 113) and optic fibres (42) transferring the image line by line onto its top-most surface area, holds the latter by virtue of a positive charge induced by 'corona' stress into the dark areas of said image, bringing it round to a first point of convergence (S) between cylinder (46) aforesaid and a feed-cylinder (62) where negative-charged dry glaze particles (59) are offered by the latter to said dark areas; there being a second point of convergence (S min) envisaged diametrically opposite on said cylinder (46) to the optic fibres, where this dusting of dry glaze (59) is transferred onto the positively-charged top surface of the tile (2) to be decorated, this having been moistened beforehand, and given a base-coat of neutral glaze incorporating a bonding-agent which will fix the decorative pattern thus 'copied' - the finished glaze being subsequently protected by application of a frit.

IPC 1-7

G03G 15/16; G03G 15/30; B41M 1/34

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

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