

Title (en)

Method for the digital decoration of ceramic tiles

Title (de)

Verfahren zum digitalen Dekorieren von keramischen Fliesen

Title (fr)

Procédé de décoration numérique de carreaux céramiques

Publication

EP 2404724 A1 20120111 (EN)

Application

EP 11172243 A 20110630

Priority

IT MO20100206 A 20100709

Abstract (en)

The method for the digital decoration of ceramic tiles comprises the followings stages of: - providing at least a digital machine (1) comprising at least a bearing frame (2) having a supporting surface (3) for supporting at least a ceramic tile (P', P'') mobile along a forward direction (4), at least a decoration unit (6) arranged above the supporting surface (3) and having a plurality of heads (7',7'') for digital printing on the ceramic tile (P', P''), the decoration unit (6) being mobile with respect to the surface (3) along at least a first direction (10) substantially at right angles to the forward direction (4) and parallel to the surface itself; - first decoration of at least a first tile (P') through at least an active head (7') able to dispense glaze inside the decoration area (20), where the other heads (7'') are inactive; - second decoration of at least a second tile (P'') through at least an active head (7') able to dispense glaze inside the decoration area (20), where the other heads (7'') are inactive; - moving the decoration unit (6) along the first direction (10) between the first and the second decoration to change at least in part the active heads (7') during the second decoration with respect to the active heads (7') during the first decoration, the decoration unit (6) being stopped during the decoration phases.

IPC 8 full level

B28B 11/04 (2006.01); **B41J 3/28** (2006.01); **B41J 3/407** (2006.01); **B41J 11/00** (2006.01); **B41J 25/308** (2006.01)

CPC (source: EP)

B28B 11/04 (2013.01); **B28B 11/048** (2013.01); **B41J 3/28** (2013.01); **B41J 3/407** (2013.01); **B41J 11/007** (2013.01); **B41J 25/3088** (2013.01)

Citation (applicant)

- WO 2006027212 A1 20060316 - TIVA SACMI COOPERATIVA MECCANI [IT], et al
- US 2007031603 A1 20070208 - ERON GERA [IL]
- WO 2008056241 A2 20080515 - MACCARI ANTONIO [IT]

Citation (search report)

- [XA] WO 2006027212 A1 20060316 - TIVA SACMI COOPERATIVA MECCANI [IT], et al
- [XA] WO 2008056241 A2 20080515 - MACCARI ANTONIO [IT]
- [A] US 2007031603 A1 20070208 - ERON GERA [IL]
- [A] EP 1972450 A2 20080924 - INGEGNERIA CERAMICA S R L [IT]
- [A] DE 10201766 A1 20020822 - HEIDELBERGER DRUCKMASCH AG [DE]

Cited by

CN105946096A; ITUB20160063A1; ITVR20110228A1; ES2565104R1; CN109955592A; CN104325548A; CN106426529A; CN111745796A; CN109454999A; US9511946B2; WO2013093668A1; WO2019239351A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2404724 A1 20120111; EP 2404724 B1 20130619; IT MO20100206 A1 20120110

DOCDB simple family (application)

EP 11172243 A 20110630; IT MO20100206 A 20100709