

Title (en)  
DEVICE FOR THE DECORATION OF CERAMIC TILES

Title (de)  
VORRICHTUNG ZUM DEKORIEREN VON KERAMISCHEN FLIESEN

Title (fr)  
DISPOSITIF PERMETTANT DE DECORER DES CARREAUX DE CERAMIQUE

Publication  
**EP 1038689 B1 20040407 (EN)**

Application  
**EP 99949020 A 19991011**

Priority  
• ES 9900322 W 19991011  
• ES 9802136 A 19981014

Abstract (en)  
[origin: EP1038689A1] It has means (1) for conveyance of the tiles (2) that are printed by means of projection of ink, characterized in that it has at least one head (3) that is constituted by at least two independent printing modules (5) that are connected to a control unit (13) that controls the operation of each printing module (5) independently, in order to print the desired motif. The printing band f of each printing module (5) is located after the adjacent modules (5). The number of printing modules (5) is such that at least the entire width of the tile is covered. In order to cover this width heads may be arranged in series. There is at least one head per color to be printed. The entire described structure permits the printing by means of a single passing of the tile. <IMAGE>

IPC 1-7  
**B41M 1/34; C04B 41/85**

IPC 8 full level  
**B28B 11/00** (2006.01); **B28B 11/04** (2006.01); **B41J 2/01** (2006.01); **B41J 3/407** (2006.01); **B41M 1/34** (2006.01)

CPC (source: EP)  
**B28B 11/001** (2013.01); **B28B 11/048** (2013.01); **B41J 2/01** (2013.01); **B41J 3/407** (2013.01)

Cited by  
CN102303982A; US2015290665A1; US10035160B2; AT501432B1; ITUB20153837A1; DE102007021765A1; DE102007021765B4; ITVR20110228A1; CN104093531A; AT501317B1; IT201800008069A1; US12030327B2; US8141970B2; EP4360874A1; WO2007091136A1; WO2017051337A1; WO2013093668A1; WO2006027212A1; WO2024089516A1; WO2011027012A1; WO2024028677A1; US8753702B2; US9511946B2; EP2100739B1; EP1872959B1; EP2100739A2; US8141981B2; US8764148B2; US10525755B2; US7976906B2; US8603589B2; US9636923B2; US9636922B2; US9656476B2; US10464339B2; WO2024127269A1; WO2020031162A3; US8328303B2; US8960828B2; US9340033B2; US11959279B2; WO2020161609A1; BE1027024A1; EP2319699A1; US8256890B2; WO2015092745A1; US9874030B2; US10450761B2; EP3696343A1; EP3808921A1; US10988942B2; US11492811B2; EP1872959A1

Designated contracting state (EPC)  
DE ES FR GB IT PT

DOCDB simple family (publication)  
**EP 1038689 A1 20000927; EP 1038689 B1 20040407; EP 1038689 B2 20100303**; BR 9907779 A 20001010; BR 9907779 B1 20110208; DE 69916234 D1 20040513; DE 69916234 T2 20050414; DE 69916234 T3 20100812; ES 2152167 A1 20010116; ES 2152167 B1 20010816; ES 2219068 T3 20041116; ES 2219068 T5 20100430; PT 1038689 E 20040831; TR 200001743 T1 20001221; WO 0021760 A1 20000420

DOCDB simple family (application)  
**EP 99949020 A 19991011**; BR 9907779 A 19991011; DE 69916234 T 19991011; ES 9802136 A 19981014; ES 9900322 W 19991011; ES 99949020 T 19991011; PT 99949020 T 19991011; TR 200001743 T 19991011