

Title (en)
METHOD FOR THE PRODUCTION OF THERMALLY CROSS-LINKED LASER ENGRAVABLE FLEXOGRAPHIC ELEMENTS AND MULTI-LAYER COMPOSITES

Title (de)
VERFAHREN ZUR HERSTELLUNG VON THERMISCH VERNETZTEN, LASERGRAVIERBAREN FLEXODRUCKELEMENTEN UNDMEHRSCHICHTVERBUNDE

Title (fr)
PROCEDE DE PRODUCTION D'ELEMENTS FLEXOGRAPHIQUES A RETICULATION THERMIQUE ET POUVANT ETRE GRAVES PAR LASER ET COMPOSITES MULTICOUCHES

Publication
EP 1353802 B1 20040818 (DE)

Application
EP 02702237 A 20020107

Priority
• DE 10100514 A 20010108
• EP 0200066 W 20020107

Abstract (en)
[origin: US6794115B2] Laser-engrivable flexographic printing elements including a thermally crosslinked, elastomeric, laser-engrivable relief-forming layer E are made by producing a multilayer composite which has at least a two-layer composite formed of a depot layer D and an uncrosslinked precursor layer V for the relief-forming layer E which is directly adjacent to the depot layer D. Optionally, the multilayer composite may include further layers, such as support foils or films and/or protective films. The precursor layer V most preferably includes at least one elastomeric binder, and at least one ethylenically unsaturated monomer and, optionally an absorber for laser radiation and/or further additives. The depot layer D most preferably includes at least one elastomeric binder, and at least one thermally decomposing polymerization initiator and, optionally, an absorber for laser radiation and/or further additives. The thermally decomposing polymerization initiators are allowed to diffuse out of the depot layer D into the precursor layer V. If desired the depot layer D may be removed. Thermal crosslinking of the precursor layer V thereby yields the crosslinked elastomeric, laser-engrivable, relief-forming layer E.

IPC 1-7
B41C 1/05

IPC 8 full level
G03F 7/004 (2006.01); **B41C 1/05** (2006.01); **B41N 1/12** (2006.01); **G03F 7/00** (2006.01); **G03F 7/11** (2006.01)

CPC (source: EP US)
B41C 1/05 (2013.01 - EP US); **Y10S 430/146** (2013.01 - EP US)

Cited by
CN108369372A

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 02054154 A2 20020711; **WO 02054154 A3 20020919**; AT E273796 T1 20040915; AU 2002235819 A1 20020716; DE 10100514 A1 20020711; DE 50200856 D1 20040923; EP 1353802 A2 20031022; EP 1353802 B1 20040818; JP 2004522618 A 20040729; US 2004048198 A1 20040311; US 6794115 B2 20040921

DOCDB simple family (application)
EP 0200066 W 20020107; AT 02702237 T 20020107; AU 2002235819 A 20020107; DE 10100514 A 20010108; DE 50200856 T 20020107; EP 02702237 A 20020107; JP 2002554788 A 20020107; US 25086703 A 20030729