

Title (en)  
Printing process for producing matte and glossy surfaces

Title (de)  
Druckverfahren zur Erzeugung von matten und glänzenden Oberflächen

Title (fr)  
Procédé d'impression pour réaliser des surfaces mates et brillantes

Publication  
**EP 1547772 B1 20070530 (DE)**

Application  
**EP 04106770 A 20041221**

Priority  
DE 10360050 A 20031222

Abstract (en)  
[origin: EP1547772A1] Substances with a low surface energy are added to the oil-based matt varnish or printing ink used in a printing process which involves printing or coating in succession with oil-based printing ink, matt varnish or ink (on parts of the printed surface) and transparent gloss varnish (over the whole printed surface). A printing process in which print material, in passing through a printing machine (2) with several printing groups (6, 8, 10, 12) followed by a varnishing group (14), is first printed with an oil-based printing ink (I) in at least one of the groups (6, 8, 10), then coated (in group 12) on parts of the printed surface with an oil-based matt varnish or printed with matt ink (II) (containing a dulling agent), and finally coated over the entire printed surface with a transparent gloss varnish (III) (in group 14). In this process, the matt varnish or matt ink (II) is modified by adding substance(s) (IV) with a low surface energy. An independent claim is also included for products printed on at least one side by this process, using oil-based offset printing ink.

IPC 8 full level  
**B41F 23/08** (2006.01); **B41M 7/00** (2006.01)

CPC (source: EP US)  
**B41F 23/08** (2013.01 - EP US); **B41M 7/02** (2013.01 - EP US)

Cited by  
DE102007059911A1; WO2009106822A1; EP1685974A3; EP1942013A3; WO2010054910A3; WO2010054910A2; US8256345B2; US9327540B2

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**EP 1547772 A1 20050629; EP 1547772 B1 20070530; EP 1547772 B2 20110316**; AT E363391 T1 20070615; CN 100488776 C 20090520; CN 1882438 A 20061220; DE 10362054 A1 20050721; DE 10362054 B4 20101230; DE 502004003934 D1 20070712; DK 1547772 T3 20070903; DK 1547772 T4 20110530; ES 2286565 T3 20071201; ES 2286565 T5 20110622; JP 2007518594 A 20070712; JP 4153546 B2 20080924; PL 1547772 T3 20071031; PL 1547772 T5 20110729; US 2006230965 A1 20061019; US 7856926 B2 20101228; WO 2005063489 A1 20050714

DOCDB simple family (application)  
**EP 04106770 A 20041221**; AT 04106770 T 20041221; CN 200480034303 A 20041221; DE 10362054 A 20031222; DE 502004003934 T 20041221; DK 04106770 T 20041221; EP 2004014534 W 20041221; ES 04106770 T 20041221; JP 2006544385 A 20041221; PL 04106770 T 20041221; US 45263306 A 20060614