

Title (en)

Wet-offset printing form with photo-thermally convertible material, process and apparatus for creating and/or erasing the image of the wet-offset printing form

Title (de)

Nassoffset-Druckform mit fotothermisch veränderbarem Material, Verfahren und Vorrichtung zur Erzeugung und/oder Löschung eines Druckbildes einer Nassoffset-Druckform

Title (fr)

Plaque d'impression offset comprenant un matériau photo-thermo convertible, procédé et dispositif pour créer et/ou effacer l'image de la plaque d'impression offset

Publication

EP 1245385 B1 20060329 (DE)

Application

EP 02405245 A 20020327

Priority

DE 10115435 A 20010329

Abstract (en)

[origin: EP1245385A2] Wet offset printing plate comprises a top layer of a material that can be photocatalytically converted to a hydrophilic state by irradiation with light and converted to a hydrophobic state by heating, where the layer includes absorption centers for radiation, especially near infrared (NIR) laser radiation, such that the layer can be heated imagewise. Independent claims are also included for the following: (1) a process for writing such a plate, comprising imagewise heating of the plate; (2) a process for erasing such a plate, comprising irradiating the plate with UV light while supplying water; and (3) apparatus for repeatedly writing such a plate, comprising a writing device for imagewise heating, an erasing device comprising one or more daylight and/or UV light sources, and a humidifying chamber for generating and maintaining a predetermined air humidity on the plate.

IPC 8 full level

B41C 1/10 (2006.01); **B41F 7/02** (2006.01); **B01J 35/02** (2006.01); **B41C 1/055** (2006.01); **B41C 1/18** (2006.01); **B41F 33/14** (2006.01); **B41F 35/02** (2006.01); **B41N 1/14** (2006.01); **B41N 3/00** (2006.01); **G03F 7/00** (2006.01); **G03F 7/004** (2006.01)

CPC (source: EP US)

B41C 1/1041 (2013.01 - EP US); **B41N 3/006** (2013.01 - EP US); **B41P 2227/70** (2013.01 - EP US)

Cited by

DE102004007600A1; EP1834769A3; US7735421B2; US7704590B2

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)

EP 1245385 A2 20021002; **EP 1245385 A3 20021120**; **EP 1245385 B1 20060329**; AT E321661 T1 20060415; DE 10115435 A1 20021024; DE 10115435 B4 20061102; DE 10115435 B8 20070208; DE 50206222 D1 20060518; DK 1245385 T3 20060724; ES 2261623 T3 20061116; JP 2003011536 A 20030115; JP 2004306613 A 20041104; JP 2006137197 A 20060601; JP 3874692 B2 20070131; US 2002139269 A1 20021003; US 2004168599 A1 20040902; US 6976428 B2 20051220; US 7051652 B2 20060530

DOCDB simple family (application)

EP 02405245 A 20020327; AT 02405245 T 20020327; DE 10115435 A 20010329; DE 50206222 T 20020327; DK 02405245 T 20020327; ES 02405245 T 20020327; JP 2002097578 A 20020329; JP 2004170392 A 20040608; JP 2005342057 A 20051128; US 10947602 A 20020328; US 77595104 A 20040210