Title (en)

METHOD AND APPARATUS FOR RENDERING AN ELECTROCOAGULATION IMAGE WATER-FAST

Title (de)

METHODE UND APPARAT ZUM WASSERFESTMACHEN VON ELEKTROKOAGULIERTEN BILDERN

Title (fr)

PROCEDE ET APPAREIL DESTINES A RENDRE UNE IMAGE OBTENUE PAR ELECTROCOAGULATION RESISTANTE A L'EAU

Publication

EP 0888222 B1 20020904 (EN)

Application

EP 97950434 A 19971226

Priority

- CA 2194129 A 19961230
- JP 9704902 W 19971226

Abstract (en)

[origin: CA2194129A1] An improved electrocoagulation printing method comprising the steps of (a) providing a positive electrolytically inert electrode having a continuous passivated surface moving at substantially constant speed along a predetermined path, the passivated surface defining a positive electrode active surface; (b) forming on the positive electrode active surface a plurality of dots of colored, coagulated colloid representative of a desired image, by electrocoagulation of an electrolytically coagulable colloid present in an electrocoagulation printing ink comprising a liquid colloidal dispersion containing said electrolytically coagulable colloid, a dispersing medium, a soluble electrolyte and a coloring agent; and (c) bringing a substrate into contact with the dots of colored, coagulated colloid to cause transfer of the colored, coagulated colloid from the positive electrode active surface onto the substrate and thereby imprint the substrate with the image. The improvement resides in treating the dots of colored, coagulated colloid transferred onto the substrate in step (c) with a crosslinking agent so as to substantially completely crosslink the colored, coagulated colloid and thereby render the printed image water-fast.
[origin: CA2194129A1] An improved electrocoagulation printing method comprising the steps of (a) providing a positive electrolytically inert electrode having a continuous passivated surface moving at substantially constant speed along a predetermined path, the passivated surface defining a positive electrode active surface; (b) forming on the positive electrode active surface a plurality of dots of colored, coagulated colloid representative of a desired image, by electrocoagulation of an electrolytically coagulable colloid present in an electrocoagulation printing ink comprising a liquid colloidal dispersion containing said electrolytically coagulable colloid, a dispersing medium, a soluble electrolyte and a coloring agent; and (c) bringing a substrate into contact with the dots of colored, coagulated colloid to cause transfer of the colored, coagulated colloid from the positive electrode active surface onto the substrate and thereby imprint the substrate with the image. The improvement resides in treating the dots of colored, coagulated colloid transferred onto the substrate in step (c) with a crosslinking agent so as to substantially completely crosslink the colored, coagulated colloid and thereby render the printed image water-fast.

IPC 1-7

B41M 5/20; B41M 7/00

IPC 8 full level

B41C 1/10 (2006.01); **B41J 2/39** (2006.01); **B41M 5/20** (2006.01); **B41M 7/00** (2006.01)

CPC (source: EP)

B41C 1/105 (2013.01); **B41M 7/00** (2013.01)

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

CA 2194129 A1 19980630; **CA 2194129 C 20010227**; DE 69715169 D1 20021010; DE 69715169 T2 20031023; EP 0888222 A1 19990107; EP 0888222 B1 20020904; JP 2000507177 A 20000613; WO 9829256 A1 19980709

DOCDB simple family (application)

CA 2194129 A 19961230; DE 69715169 T 19971226; EP 97950434 A 19971226; JP 52987398 A 19971226; JP 9704902 W 19971226