

Title (en)

MONOCHROMIC AND POLYCHROMIC PRINTING OF AN IMAGE REPRODUCED BY ELECTRO-COAGULATION OF A COLLOID

Publication

EP 0235700 B1 19911211 (EN)

Application

EP 87102421 A 19870220

Priority

CA 502345 A 19860220

Abstract (en)

[origin: EP0235700A1] A method and apparatus for reproducing an image and transferring same onto an end-use support. A positive electrolytically inert electrode is provided in the form of an endless elongated belt(34) moving at substantially constant speed along a closed horizontal path and having an electrode active surface (32) extending vertically. A plurality of negative electrolytically inert electrodes (68) which are electrically insulated from one another are arranged side-by-side in rectilinear alignment to define a series of corresponding electrode active surfaces (70) disposed transversely of the belt (34) and spaced from the positive electrode active surface (32) thereof by a constant predetermined electrode gap (72). The electrode gap (72) is filled with a substantially liquid colloidal dispersion containing an electrolytically coagulable colloid, a liquid dispersing medium and a soluble electrolyte and having a substantially constant temperature. Selected ones of the negative electrodes (68) are electrically energized to cause point-by-point selective coagulation and adherence of the colloid onto the positive electrode active surface (32) of the belt (34) opposite the electrode active surface (70) of the energized negative electrodes while the belt is moving, thereby forming a series of corresponding dots of coagulated colloid representative of a desired image. Any remaining non-coagulated colloid is then removed from the positive electrode active surface (32). The colloid is treated either before or after the coagulation thereof with a coloring agent to obtain dots of colored, coagulated colloid which are thereafter contacted with an end-use support (22) to cause transfer of the coloring agent onto the end-use support (22) and thereby imprint the end-use support with the image.

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Cited by

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