

Title (en)

ROTARY PRINTING MACHINE HAVING A FORME CYLINDER AND AN INKING UNIT POSITIONED ON SAID FORM CYLINDER

Title (de)

ROTATIONS-DRUCKMASCHINE MIT EINEM FORMZYLINDER UND EINEM AN DIESEN FORMZYLINDER ANGESTELLTEN FARBWERK

Title (fr)

PRESSE ROTATIVE EQUIPEE D'UN CYLINDRE GRAVE ET D'UN MECANISME D'ENCRAGE INSTALLE SUR LEDIT CYLINDRE GRAVE

Publication

**EP 2576221 B1 20140319 (DE)**

Application

**EP 12717770 A 20120503**

Priority

- DE 102011078283 A 20110629
- EP 2012058067 W 20120503

Abstract (en)

[origin: WO2013000602A1] The invention proposes a rotary printing machine having a forme cylinder and an inking unit positioned on said forme cylinder, wherein the inking unit has a roller train comprising a film roller and at least one further roller, wherein the inking unit has a plurality of inking zones arranged one beside the other in the axial direction of the film roller, wherein a lateral surface of the film roller has a regular structure formed by grooves, wherein the structure of the lateral surface of the film roller is formed by a plurality of grooves which extend rectilinearly parallel to one another and slope up to the right in relation to an axis of rotation of the film roller, and by a plurality of grooves which extend rectilinearly parallel to one another and slope up to the left in relation to the axis of rotation of the film roller, wherein a plurality of the grooves sloping up to the right and a plurality of the grooves sloping up to the left are arranged in such a way as to cross over one another, wherein surfaces which are each bounded by at least one groove sloping up to the right and by at least one groove sloping up to the left, and which each form part of the lateral surface of the film roller, together form a percentage contact area of a maximum of 10% in relation to the lateral surface of the film roller, which is a closed enveloping surface, wherein the roller train has a maximum of five nip locations along a transporting path used to transport printing ink, extending from the film roller to the forme cylinder, wherein the lateral surface of the film roller has different degrees of hardness depending on the percentage contact area thereof, such that said lateral surface, in the case of the percentage contact area ranging from more than 0% to a maximum of 1%, is formed from a material with a hardness of at least 500 HV10 and, in the case of a percentage contact area ranging from more than 1% to a maximum of 5%, is formed from a material with a hardness ranging from more than 100 HV10 to less than 500 HV10 and, in the case of a percentage contact area ranging from more than 5% to a maximum of 10%, is formed from a material with a hardness of between at least 30 HV10 and 100 HV10.

IPC 8 full level

**B41F 31/00** (2006.01); **B41F 31/26** (2006.01)

CPC (source: EP)

**B41F 31/00** (2013.01); **B41F 31/26** (2013.01); **B41N 7/00** (2013.01); **B41N 2207/02** (2013.01); **B41N 2207/10** (2013.01)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**DE 102011078283 A1 20130103**; **DE 102011078283 B4 20150122**; EP 2576221 A1 20130410; EP 2576221 B1 20140319; WO 2013000602 A1 20130103

DOCDB simple family (application)

**DE 102011078283 A 20110629**; EP 12717770 A 20120503; EP 2012058067 W 20120503