

Title (en)

Process and related apparatus for the automatic washing of components of printing units for rotary-drum printing machines.

Title (de)

Verfahren und dazu gehörende Vorrichtung zum automatischen Reinigen von Teilen von Druckeinheiten für Rotationsdruckmaschinen.

Title (fr)

Procédé et appareil pour le nettoyage automatique de pièces d'unités d'impression pour rotatives d'impression à tambour.

Publication

**EP 0277481 A2 19880810 (EN)**

Application

**EP 88100136 A 19880108**

Priority

IT 1923787 A 19870203

Abstract (en)

Process for the automatic washing of the printing units of rotary-drum machines, kept in work position, consisting of the injection of pressurized water with preset intermittence unto the printing drum through the color feed tube, so as to force the water to mix with the residuals of color remaining within said color feed tube, within the drum and around the magnetic printing roller, then of the creation of a continuous depression inside the drum, so as to allow the continuous removal of the water-color mixture formed in said drum, the steps of intermittent injection of the washing water under pressure and of the start and end of the aspiration being controlled by an appropriately programmed microprocessor and provided with the printing machine rotating at a reduced speed with respect to the operating speed. Said process furthermore provides, to improve the effectiveness of the wash, the injection of pressurized air with preset intermittence so as to create alternate pressurized water/compressed air cycles such as to facilitate the elimination of all the residuals of color within the devices of the printing unit, said cycles of washing, air injection and aspiration being controlled by a microprocessor. Said process is produced by an automatic apparatus, constituted by a pump for the injection of pressurized water into the color feed tube, by a source of compressed air, and by an aspirating pump adapted to create a depression within the drum and to aspirate and draw out the mixture of water and residuals of color formed inside the drum, and by at least one tubular body connected to said aspirating pump, arranged inside the drum and having such holes so as to create a continuous depression inside said drum and thus allow, with the printing machine rotating at reduced speed and with the activation of the magnetic attraction field of the printing roller at the compressed air injection steps, the complete washing of all the components of the printing head, according to intervention steps programmed by means of a microprocessor.

IPC 1-7

**B41F 35/00**

IPC 8 full level

**B41F 35/00** (2006.01)

CPC (source: EP)

**B41F 35/004** (2013.01)

Cited by

US6135025A; EP0743181A1; US5848606A; EP0494339A1; EP0556460A1; EP0364918A3; EP0714772A3; US5775218A; CN108099401A; US6431064B1; DE102015224334A1; WO9521701A3; EP0714772A2

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**EP 0277481 A2 19880810; EP 0277481 A3 19890726; EP 0277481 B1 19910731;** DE 3863931 D1 19910905; IT 1218124 B 19900412; IT 8719237 A0 19870203

DOCDB simple family (application)

**EP 88100136 A 19880108;** DE 3863931 T 19880108; IT 1923787 A 19870203