Title (en)

Process and apparatus of combined and simplified type for cleaning the cylinders of rotary printing machines

Title (de)

Verfahren und Vorrichtung kombinierter und vereinfachter Art zur Reinigung der Zylindern von Rollenrotationsdruckmaschinen

Title (fr)

Procédé et appareil de type simplifié et combiné pour nettoyer les cylindres de machines d'impression rotatives

Publication

EP 2818321 A1 20141231 (EN)

Application

EP 14173960 A 20140625

Priority

IT BO20130331 A 20130626

Abstract (en)

Process of combined and simplified type for cleaning the cylinders of continuous printing machines, provided with groups of printing cylinders (C1-C1', Cn-Cn'), that act on opposite sides of the endless web (N) to be printed unwound from a reel, wherein each printing cylinder is provided with cleaning means (P1-P1', Pn-Pn') and which includes a primary step for supplying to one or to both opposite sides of said web (N), upstream of the group of printing cylinders, the majority or all (80-100%) of the cleaning liquid with solvent required to clean the cylinders of the printing machine and that can be safely carried by the web also in the subsequent drying step, while said cleaning units (P1-P1', Pn-Pn') of the groups of printing cylinders are entrusted both with the mechanical action and with the secondary supply of any remaining amount (0-20%) of the cleaning liquid with solvent or of a cleaning liquid with low or even no solvent content and proportionally high water content, to maintain at least lubricated and clean the side areas (ZC) of the cylinders that are not in contact with the paper web, providing for the use of cleaning liquids with oil-based solvent, with a limited evaporation factor of the solvent contained therein, so as to be able to use large amounts of these oil-based liquids to decrease the times of current washing and cleaning cycles of printing cylinders, characterized by the fact that said primary step of supplying the cleaning liquid with solvent is carried out intermittently, so that lengths of web (N) to which amounts (Q) of liquid with solvent have been applied are followed by lengths (N') of the web to which said liquid with solvent has substantially not been applied, while the amounts of liquid accumulated upstream of the printing cylinders (C1, C1') will be applied to said lengths of web (N') in a distributed fashion by the calendering action that these cylinders exert on the web (N) being drawn, so that these lengths of web (N') will also pass through the cylinders (C1, C1') with amounts of liquid equivalent to those of the lengths wetted in said primary supply step, so that when the feed speed of the web (N) to be printed varies, the interval of time (TB, TB', TB") elapsing between one step and the subsequent step (TA) for supplying the liquid with solvent is made to vary in an inversely proportional fashion, and also characterised in that constant amounts of liquid with solvent (Q) are supplied to the web (N) in the unit of time.

IPC 8 full level

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CPC (source: EP)

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Citation (applicant)

- IT 1375781 B
- IT 1375783 B
- WO 2008084361 A1 20080717 - FINELETTRA INTERNAT S A [LU], et al
- EP 0816080 A2 19980107 - JIMEK AB [SE]

Citation (search report)

- [Y] EP 0816080 A2 19980107 - JIMEK AB [SE]
- [IY] WO 2008084361 A1 20080717 - FINELETTRA INTERNAT S A [LU], et al
- [AD] WO 2008084359 A1 20080717 - FINELETTRA INTERNAT S A [LU], et al
- [A] DE 4301410 A1 19940721 - BALDWIN GEGENHEIMER GMBH [DE]

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