

Title (en)
Method for cleaning the surfaces of cylinders

Title (de)
Verfahren zur Reinigung der Oberflächen von Walzen

Title (fr)
Methode de nettoyage de cylindres

Publication
EP 1621263 A1 20060201 (DE)

Application
EP 05105190 A 20050614

Priority
DE 102004037215 A 20040730

Abstract (en)
The roller (1) surfaces (1a) are laser (4) cleaned. The laser is mounted on a traverse (5) over the roller. It is moved along the length of the roller on the traverse. The movement (I-III) is oscillatory, continuous or in steps. Laser energy density is 0.1 W/cm² to 0.5 MW/cm². Using excimer lasers, the wavelength is 100-400 nm, using Nd-YAG lasers it is 1000-2000 nm and using CO₂ lasers it is 5000-12000 nm. The pulse interval is 1 fs to 1 ms. The laser wavelength is between 500 and 900 nm. Contaminating deposits (3) removed, are sucked away. A set angle of incidence of the laser beam on the roller surface is adjusted.

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CPC (source: EP)
B08B 3/123 (2013.01); **B08B 7/0042** (2013.01); **D21G 3/00** (2013.01); **B41P 2235/12** (2013.01)

Citation (search report)
• [X] US 5592879 A 19970114 - WAIZMANN FRANZ [DE]
• [X] FR 2760403 A1 19980911 - LASERALP IND [FR]
• [X] DE 4427152 A1 19960215 - JET LASER SYSTEME GES FUER OBE [DE], et al

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