

Title (en)

PAPER MACHINE ROLLER HAVING FIBRE BRAGG SENSORS

Title (de)

PAPIERMASCHINEN-WALZE MIT FASER-BRAGG-SENSOREN

Title (fr)

CYLINDRE POUR MACHINES À PAPIER, AVEC CAPTEURS À FIBRES DE BRAGG

Publication

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Application

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Abstract (en)

[origin: WO2012113747A1] The invention relates to a roller (1) for use in paper machines, having a roller core (11), a roller covering (12) surrounding the roller core (11) and at least one optical waveguide (21) having a plurality of fibre Bragg gratings (22). The at least one optical waveguide (21) is either arranged between the roller core (11) and the roller covering (12) or embedded in the roller covering (12). Sections of the at least one optical waveguide (21) which each contain a fibre Bragg grating (22) alternate with sections of the at least one optical waveguide (21) which are free of fibre Bragg gratings (22) in the longitudinal direction of the optical waveguide. Sections of the at least one optical waveguide (21) which each contain a fibre Bragg grating (22) also enclose an angle with a circumferential direction to the roller (1) of less than 80° and in particular less than 60° and further in particular less than 45°.

IPC 8 full level

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