

Title (en)

PROCESS AND DEVICE FOR DETECTING THE WINDING OF THREAD ON A ROTATING ROLLER

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ERKENNUNG EINER FADENAUFSPULUNG AUF EINER ROTIERENDEN WALZE

Title (fr)

PROCEDE ET DISPOSITIF POUR DETECTER L'ENROULEMENT D'UN FIL SUR UN CYLINDRE EN ROTATION

Publication

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Application

**EP 95940113 A 19951122**

Priority

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Abstract (en)

[origin: DE19543118A1] To monitor the winding of a yarn round a rotating roller (1), a light bundle (5) is directed at the roller (1) to form a light band (50) on a mantle line of the roller (1) and cover the monitoring zone. The light sensor (6-8) is aligned at the monitoring zone (20), outside the lamps (3,4), and away from the light bundle (5) reflected from the roller (1). Pref. the light band (50) has a width of less than 5 mm, and pref. less than 2 mm. The light bundle (5) is aligned at the roller (1) at an adjusted angle (  $\alpha$  ) of 3-8 deg and pref. 5 deg . The roller (1) is illuminated with a monochrome light, with light beams (5) from lasers. The roller (1) is illuminated by two lamps (3,4) at opposite ends, each delivering a light bundle (5) to the roller (1) surface, to form a common light strip (50) at the monitoring zone (20). The roller (1) is a monitoring roller in a winder assembly, for continuous synthetic filaments. The light sensor (6-8) registers reflected light from a filament winding (12), generally at the centre over the roller (1) monitoring zone (20) through the reflected light at the beam entry in a sensor parallel to the lamp (3) giving the light beams (5). The sensor (6-8) receives light to be registered as electrical signals, and their deviation is amplified to trigger an alarm signal.

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