

Title (en)

Coated member, especially roller, made of carbon fiber-reinforced plastic (CFRP) for paper machines and printing presses, and method for the production of such a member

Title (de)

Beschichteter Körper, insbesondere Walze, aus kohlefaserverstärktem Kunststoff (CFK) für Papier- und Druckmaschinen und Verfahren zum Herstellen eines solchen Körpers

Title (fr)

Pièce revêtu, en particulier un rouleau, en matière plastique renforcée par des fibres de carbone (PRFC), utilisé dans des machines à papier et des imprimantes et procédé pour produire ledit corps

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Application

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Abstract (en)

[origin: WO2006089519A1] The invention relates to a coated member, especially a roller, made of carbon fiber-reinforced plastic (CFK) for paper machines and printing presses. Said coated member comprises an adhesive layer and a wear-resistant hard metal or oxide ceramic layer which is applied to the adhesive layer. The inventive coated member is characterized in that the adhesive layer is made of ductile metal which is selected among the group encompassing copper, nickel, iron, lead, and tin and is applied using plasma spraying or flame spraying. The invention further relates to a method for producing a coated member made of carbon fiber-reinforced plastic (CFK) for paper machines and printing presses, particularly a roller. According to said method, an adhesive layer made of a ductile material that is selected among the group comprising copper, nickel, iron, lead, and tin is applied to a CFK member by means of plasma spraying or flame spraying while the member is maintained at a temperature not exceeding 200°C with the aid of cooling measures. In another step, a wear-resistant hard metal or oxide ceramic layer is applied to the adhesive layer.

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