

Title (en)

Roll cover made of fibre reinforced composite material

Title (de)

Faserverbund Walzenbezug

Title (fr)

Revêtement de rouleau en matière composite renforcée de fibres

Publication

EP 1612329 B1 20090624 (DE)

Application

EP 05103508 A 20050428

Priority

DE 102004025116 A 20040521

Abstract (en)

[origin: EP1612329A1] The cover(8) material is based on fibers(5) in a matrix(6) and the compound composition continuously varies depending on the area of the roll surface(14) to which the compound is applied. Fillers(9) of different types may also be included in the composition and the latter and/or the fiber(5) content and/or matrix(6) type and/or filler may continuously vary. Composition may vary in the axial and/or radial(7) direction of the roll body(4) onto which the compound is applied. Fiber type, content and/or diameter and/or length distribution and/or orientation may be varied. At least one fiber type may comprise loose fibers of specific length distribution and/or contains fibers which are randomly embedded in the matrix. Fibers have a length distribution of 1-10mm, preferably 1-3mm and/or more preferably 3-10mm. The matrix can comprise one or more different resin types. Matrix composition can be altered by varying the mixing ratio of at least one resin and/or hardener. Fillers can be used to influence wear resistance and/or viscosity and/or surface tension and/or conductivity. Filler particle size can also be varied. An independent claim is included for a process for manufacturing the claimed roll cover. A compound comprising fibers and a matrix is applied onto specific positions on the roll and the composition of matrix and fibers is varied according to the axial and/or radial position on the roll.. The same step is repeated at different positions on the roll.

IPC 8 full level

D21G 1/02 (2006.01); **B29C 45/14** (2006.01); **B29C 70/30** (2006.01); **D21F 3/08** (2006.01); **F16C 13/00** (2006.01)

CPC (source: EP)

D21F 3/08 (2013.01); **D21G 1/0233** (2013.01)

Cited by

DE102012205206A1; DE102012205221A1; WO2013144013A1; WO2013144015A1; CN104254646A; DE102012205227B3; CN104220670A; CN113167027A; CN104204347A; WO2010079261A1; WO2013160117A1; WO2011035969A1; US10145065B2; EP2644773A1

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DOCDB simple family (publication)

EP 1612329 A1 20060104; **EP 1612329 B1 20090624**; **EP 1612329 B2 20130109**; AT E434683 T1 20090715; DE 102004025116 A1 20051208; DE 502005007553 D1 20090806

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