

Title (en)

GRADING RING FOR AN HVDC TRANSFORMER WINDING OR AN HVDC REACTOR WINDING

Title (de)

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Title (fr)

ANNEAU DE PROTECTION POUR UNE BOBINE DE TRANSFORMATEUR DE TRANSMISSION DE COURANT CONTINU HAUTE TENSION OU UNE BOBINE DE RÉACTANCE DE TRANSMISSION DE COURANT CONTINU HAUTE TENSION

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Abstract (en)

[origin: WO2012093052A1] The invention relates to a grading ring (24) for an HVDC transformer winding or an HVDC reactor winding. Said winding comprises an annular core (28), which has a conductive surface (29) and is surrounded by a layer (30) made of cellulose material. According to the invention, said layer (30) is designed as a composite, wherein the resistivity of said composite is reduced as compared to untreated cellulose material. This has the advantage that a voltage drop is better distributed over the layer (30) of the grading ring when an electric direct current field is applied to the grading ring. Load peaks can thus be reduced, and as a result the grading ring (24) can advantageously have a lower height (h) and/or smaller radii (r) of the corners of the cross-section of the grading ring and/or a thinner layer thickness (s) of the layer (30). The design freedom for creating the grading ring can thus advantageously be increased and the material requirement can be decreased.

IPC 8 full level

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