

Title (en)
A METHOD FOR PRODUCING A TRANSFORMER

Title (de)
VERFAHREN ZUR HERSTELLUNG EINES TRANSFORMATORS

Title (fr)
PROCÉDÉ DE PRODUCTION D'UN TRANSFORMATEUR

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Application
EP 22208680 A 20221121

Priority
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Abstract (en)
A method for producing a transformer (1), in particular a medium voltage instrument transformer, comprising the steps of winding (101) a coil of a transformer (1) with an insulation material (2) comprising capsules (3) with a chemical initiator (4), preparing (102) an active part of the transformer (1), wherein the active part comprises the wound coil, casting (103) the active part of the transformer (1) with an impregnation material (7), wherein the impregnation material (7) is an epoxy resin or a silicone; increasing (105) a temperature of the active part of the transformer (1) to release chemical initiator (4) from the capsules (3) to allow cross-linking, while the cross-linking is carried out until curing of the impregnation material (7); and cooling (106) the transformer (1). Further, after the step of casting (103) the active part of the transformer (1) and before the step of increasing (105) the temperature of said active part to allow cross-linking, a temperature of the active part of the transformer (1) is increased (104) to reduce the viscosity of the impregnation material (7), and said cross-linking is initiated by a temperature higher than the activation temperature of the chemical initiator (4) to release the chemical initiator (4) from the capsules (3). Furthermore, the insulation material (2) is poly(ethylene terephthalate) non-woven porous fabric, polypropylene non-woven fabric, fiberglass or crepe paper. The insulation material (2) has distributed on its surface the chemical initiator (4) encapsulated in capsules (3). The capsules (3) are adapted to release the chemical initiator (4) in a temperature higher than an activation temperature of the chemical initiator (4).

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Citation (applicant)
• CN 105047256 A 20151111 - ZHUZHOU TIMES NEW MAT TECH CO
• WO 2017012735 A1 20170126 - SIEMENS AG [DE]

Citation (search report)
• [Y] US 5904984 A 19990518 - SMITH JAMES D B [US], et al
• [Y] WO 2017088932 A1 20170601 - ABB SCHWEIZ AG [CH]
• [A] US 2008251757 A1 20081016 - YAMAMOTO HISANAO [JP], et al

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