

Title (en)
TRANSFORMER CORE OR TRANSFORMER SHEET HAVING AN AMORPHOUS AND/OR NANOCRYSTALLINE MICROSTRUCTURE AND METHOD FOR THE PRODUCTION THEREOF

Title (de)
TRANSFORMATORKERN ODER TRANSFORMATORBLECH MIT EINER AMORPHEN UND/ODER NANOKRISTALLINEN GEFÜGESTRUKTUR UND VERFAHREN ZU DESSEN HERSTELLUNG

Title (fr)
NOYAU DE TRANSFORMATEUR OU TÔLE DE TRANSFORMATEUR AVEC UNE STRUCTURE AMORPHE ET/OU NANOCRISTALLINE ET PROCÉDÉ POUR SA FABRICATION

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Abstract (en)
[origin: WO2011039001A1] The invention relates to a transformer core or transformer sheet and a method for the production thereof. According to the invention, the transformer sheet (and the transformer core) comprises magnetically soft layers (22) and separator layers (19) assembled not by stacking the transformer sheets but as a monolithic layer composite. The method according to the invention enables said construction, in that the transformer sheet (or the transformer core) is produced electrochemically by repeated deposition of magnetically soft layers (22) and separating layers (19) on a base body (12). To this end, after applying the electrically insulating separating layers (19), starting layers (21) for electrochemically coating the subsequent magnetically soft layers (22) are applied. The transformer cores and transformer sheets according to the invention are produced having an amorphous and/or nanocrystalline microstructure, whereby advantageously low magnetization losses and high permeability values can be achieved.

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