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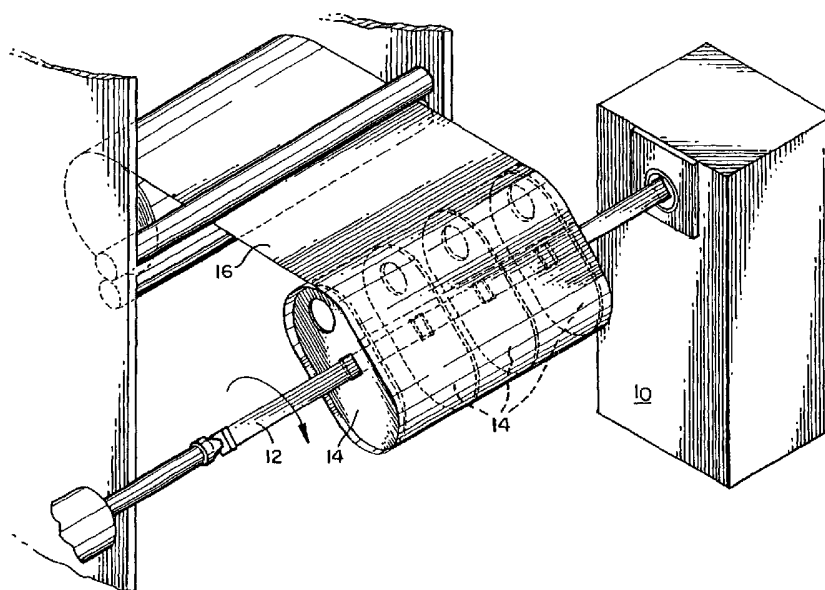
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- (74) Agents: **KEANE, Patrick, C.** et al.; Burns, Doane, Swecker & Mathis, LLP, P. O. Box 1404, Alexandria, VA 22313-1404 (US).
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- (71) Applicant (for all designated States except US): **ABB TECHNOLOGY AG** [CH/CH]; Affolternstrasse 44, CH-8050 Zurich (CH).
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[Continued on next page]

(54) Title: LOW VOLTAGE COMPOSITE MOLD



(57) Abstract: A transformer coil is produced by forming a sheet of composite material over a plurality of annular shaped support plates to form an inner layer. A coil is wound around the inner layer. An outer layer is formed by wrapping a sheet of composite material over the coil. The outer layer is mechanically attached to the coil. A base is attached to the coil assembly and epoxy is used to encapsulate the coil. The epoxy forms a bond with the inner and outer layers, which become an integral part of the transformer coil.

WO 2004/114332 A3

**Declarations under Rule 4.17:**

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)*

- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations*

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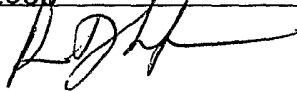
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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : H01F 27/02, 27/08, 27/28, 27/30 US CL : 336/90, 206, 182, 199, 220, 179, 209 According to International Patent Classification (IPC) or to both national classification and IPC																
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 336/90, 206, 182, 199, 220, 179, 209 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPAT; US-PGPUB; EPO; JPO; DERWENT; IB_TBD Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) winding, encapsulate, transformer, coil, composite epoxy.																
C. DOCUMENTS CONSIDERED TO BE RELEVANT <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Category *</th> <th style="width: 70%;">Citation of document, with indication, where appropriate, of the relevant passages</th> <th style="width: 20%;">Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Y</td> <td>US 5,589,808 A (CLARK et al) 31 December 1996 (31.12.1996), figure 3; col 4, lines 45-65.</td> <td style="text-align: center;">6-9</td> </tr> <tr> <td style="text-align: center;">Y</td> <td>US 2002/0101315 A1 (HAMMER et al) 1 August 2002 (01.08.2002).</td> <td style="text-align: center;">6-9</td> </tr> <tr> <td style="text-align: center;">A</td> <td>US 4,095,206 A (HISHIKI) 13 June 1978 (13.06.1978)</td> <td style="text-align: center;">1-5</td> </tr> <tr> <td style="text-align: center;">A</td> <td>US 6,221,297 B1 (LANOUE et al) 24 April 2001 (24.04.2001)</td> <td style="text-align: center;">1-5</td> </tr> </tbody> </table>		Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	Y	US 5,589,808 A (CLARK et al) 31 December 1996 (31.12.1996), figure 3; col 4, lines 45-65.	6-9	Y	US 2002/0101315 A1 (HAMMER et al) 1 August 2002 (01.08.2002).	6-9	A	US 4,095,206 A (HISHIKI) 13 June 1978 (13.06.1978)	1-5	A	US 6,221,297 B1 (LANOUE et al) 24 April 2001 (24.04.2001)	1-5
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<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.																
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> * Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed </td> <td style="width: 50%; vertical-align: top;"> "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family </td> </tr> </table>		* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family													
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