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54 A chip transformer and a method of producing a chip transformer.

57 A chip transformer comprising a substrate carrying a plurality of ferrite sheets (1 to 8), at least some of the ferrite sheets (1, 2, 6, 7, and 8) being provided with one or several conductor path segments (1b, 2b, 4b, 6b, 7b, 8b), where the conductor path segment(s) on each ferrite sheet is/are optionally connected to one or more conductor path segments on one or more of the other ferrite sheets to form a primary winding and a secondary winding of the transformer. The ferrite material is composed as follows $\text{Li}_{0,5(1+t-z-c)}\text{Zn}_z\text{Mn}_m\text{Ti}_t\text{Co}_c\text{Fe}_{(1-0,2z-0,6t-0,4m-0,2c-\varepsilon)}$ where $0 \leq t \leq 0,2$; $0,2 \leq z \leq 0,5$; $0,2 \leq m \leq 0,4$; $0,02 \leq c \leq 0,05$; and ε is of the magnitude 0,06, Bi_2O_3 also being added. The latter material discloses a specific resistivity which is so high that additional isolating layers between the windings can be avoided. The omission of the isolating layers ensures a high degree of freedom as to positioning of the individual windings relative to one another.

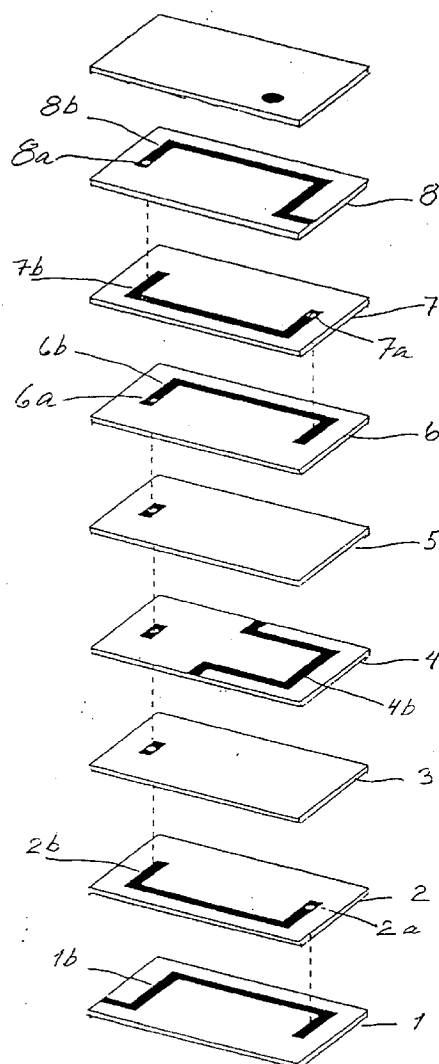


Fig 1



European Patent
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EUROPEAN SEARCH REPORT

Application Number

EP 92 61 0058

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	NEW ELECTRONICS. INCORPORATING ELECTRONICS TODAY vol. 23, no. 7, July 1990, LONDON GB pages 45 - 46 A. MACLEOD * the whole document *	1-3	H01F17/00 H01F41/02 H01F41/04
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D,A	FR-A-2 604 287 (MURATA MANUFACTURING COMP.)		
A	IEEE TRANSACTIONS ON COMPONENTS, HYBRIDS, AND MANUFACTURING TECHNOLOGY vol. 8, no. 1, March 1985, NEW YORK US pages 221 - 227 C.K. MAITI ET AL		TECHNICAL FIELDS SEARCHED (Int. Cl.5) H01F
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 26 MARCH 1993	Examiner DECANNIERE L.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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