

Title (en)  
INDUCTIVE MINIATURE STRUCTURAL ELEMENT, ESPECIALLY ANTENNA

Title (de)  
INDUKTIVES MINIATUR-BAUELEMENT, INSBESONDERE ANTENNE

Title (fr)  
COMPOSANT MINIATURE INDUCTIF, NOTAMMENT ANTENNE

Publication  
**EP 1620920 B1 20061213 (DE)**

Application  
**EP 04789918 A 20041002**

Priority  
• DE 2004002205 W 20041002  
• DE 10351119 A 20031103

Abstract (en)  
[origin: WO2005045992A1] Disclosed is an inductive miniature structural element, particularly an antenna. Said structural element comprises a winding member (1) which is embodied as a flat component and on which three coil windings (2X, 2Y, 2Z) are mounted in such a way that the axes of said coil windings point in the three three-dimensional directions (X, Y, Z). The winding member (1) is made at least in part of ferrite material while the top face and the bottom face thereof are provided with guiding elements (1.5, 1.6, 1.7, 1.8) for directing the third coil winding. The winding member (1) is placed on a coil plate (3) made of electrically non-conducting, non-ferromagnetic material and is connected thereto. The coil plate (3) is provided with recesses into which the guiding elements that are located on the bottom face of the winding member (1) engage. The ends of the first and second coil winding (2X, 2Y) are wound around the guiding elements located on the bottom face of the winding member, respectively, while the ends of the third coil winding (2Z) are wound around corners or projections of the coil plate (3), respectively.

IPC 8 full level  
**H01Q 7/08** (2006.01); **H01F 5/02** (2006.01); **H01F 41/04** (2006.01); **H01Q 1/22** (2006.01); **H01Q 21/24** (2006.01); **H01F 3/00** (2006.01); **H01F 5/00** (2006.01)

CPC (source: EP US)  
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**WO 2005045992 A1 20050519**; AT E348416 T1 20070115; CA 2544730 A1 20050519; CN 1875521 A 20061206; DE 10351119 A1 20050602; DE 502004002306 D1 20070125; DK 1620920 T3 20070319; EP 1620920 A1 20060201; EP 1620920 B1 20061213; ES 2278351 T3 20070801; JP 2007538417 A 20071227; PL 1620920 T3 20070430; US 2007091009 A1 20070426; US 7339450 B2 20080304

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