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COIL

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Abstract (en)
The present invention relates to the structure of coils that can be used for transformers and choke coils. The objective of the present invention is to obtain coils that show little iron loss and a small decrease in inductance due to an increase in electric current. The structure is a coil comprising a ring-like core (2) made of amorphous or microcrystalline metal on the surface of which at least one bar core (5) whose length is longer than the inside diameter of the aforesaid ring-like core is placed and fixed as shown in Fig. 1, with the aforesaid bar core wound with an electrically conductive material (6) - particularly a coil comprising at least two ring-like cores (2, 2) between the surfaces of which at least one bar core (3) whose length is longer than the inside diameter of the aforesaid ring-like core is inserted and fixed, with the aforesaid bar core wound with an electrically conductive material (5). Furthermore, the coil of the present invention can be fabricated with great ease compared with the conventional coils with a ring-like core wound with copper wire, such as toroidal coils. The coil of the present invention also shows less iron loss than the conventional coils using cut cores and toroidal cores, and therefore offers the excellent advantages of being able to save energy and showing a small decrease in inductance due to an increase in electric current. Because of this, the coil of the present invention can be utilized for a wide range of applications, such as transformers and choke coils. <IMAGE>

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