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INDUCTOR

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INDUCTEUR

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Application

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Abstract (en)

The embodiments of the present application relate to the technical field of inductors. Provided is an inductor, comprising: a plurality of coils and a magnetic core. The magnetic core comprises: an upper bottom plate and a lower bottom plate, which are arranged in parallel and opposite each other; a plurality of winding columns, which are located between the upper bottom plate and the lower bottom plate, and around which the plurality of coils are wound; and at least one non-winding column, which is arranged between the upper bottom plate and the lower bottom plate and the lower bottom plate, wherein the numbers of turns of coils on at least two of the winding columns are different, and the directions of currents in the coils are opposite; and there are air gaps in the at least two winding columns, around which the coils are wound for different numbers of turns, and the sizes of the air gaps in the winding columns are different. By means of the inductor in the embodiments, an inductor having different proportions of magnetic loss and copper loss can be configured according to different heat dissipation conditions of the environment in which the inductor is located, thereby realizing the differentiated design of an inductor.

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