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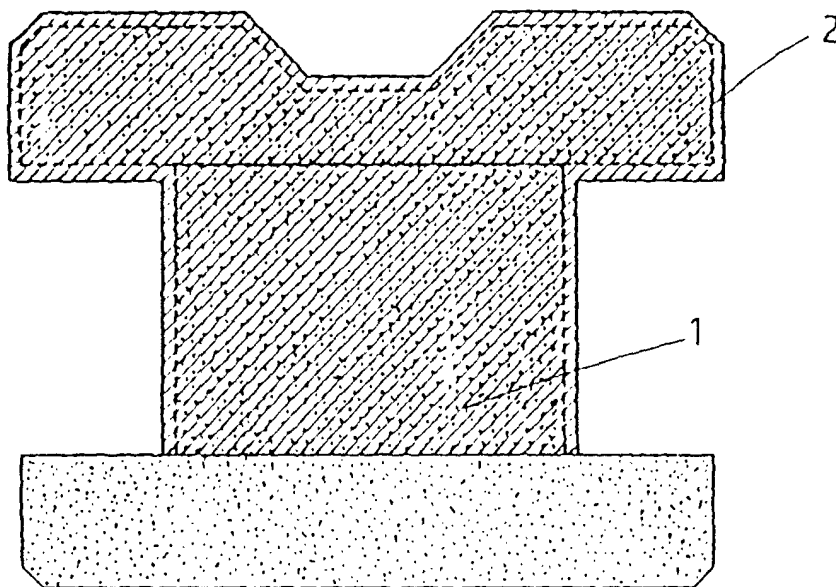
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(54) **Glazing covered ferrite core electrode terminal of a surface mounting inductor**

(57) A glazing covered ferrite core electrode terminal has a ferrite core (1), a glazing covered layer (2) coated on a surface of the ferrite core (1), a silver paste layer (3) disposed on the glazing covered layer (2), a

nickel plated layer (4) disposed on the silver paste layer (3), a solder plated layer (5) disposed on the nickel plated layer (4), and a solder paste layer (6) disposed on the solder plated layer (5).



F I G. 1

Description

[0001] The present invention relates to a ferrite core electrode terminal. More particularly, the present invention relates to a ferrite core electrode terminal of a surface mounting inductor.

[0002] A conventional ferrite core electrode terminal is coated by a silver paste. Since the surface of the ferrite core electrode terminal has a plurality of gas spacings, some gas spacings will remain between the ferrite core electrode terminal and the silver paste. The silver paste will release from the ferrite core electrode terminal under high temperatures. Furthermore, the surface of the silver paste will be uneven so that a further soldering result will be poor.

[0003] Object of the present invention is to provide a ferrite core electrode terminal in which the silver paste is firmly bonded to the surface and will not release from the ferrite core electrode terminal even at high temperatures.

[0004] The problem is solved by a ferrite core electrode terminal according to claim 1 which has a glazing covered layer between a silver paste layer and a ferrite core so that an electroplating solution will not enter the surface of the ferrite core. A preferred embodiment of the glazing covered ferrite core electrode terminal according to the invention has a glazing covered layer, a silver paste layer, a nickel paste layer, a solder plated layer, and a solder paste layer to reinforce a ferrite core.

[0005] A preferred embodiment of the present invention will now be described in detail as illustrated in the accompanying drawing in which:

FIG. 1 is a schematic view illustrating a ferrite core of a preferred embodiment coated by a glazing covered layer; and FIG. 2 is a sectional assembly view of a glazing covered ferrite core electrode terminal of a preferred embodiment in accordance with the present invention.

[0006] Referring to FIGS. 1 to 3, a glazing covered ferrite core electrode terminal comprises a ferrite core 1, a glazing covered layer 2 coated on a surface of the ferrite core 1, a silver paste layer 3 disposed on the glazing covered layer 2, a nickel plated layer 4 disposed on the silver paste layer 3, a solder plated layer 5 disposed on the nickel plated layer 4, and a solder paste layer 6 disposed on the solder plated layer 5.

[0007] The glazing covered ferrite core electrode terminal is processed by an infrared reflow method.

a glazing covered layer (2) is coated on the surface of the ferrite core (1) and the silver paste layer (3) is disposed on the glazing covered layer (2).

2. A glazing covered ferrite core electrode terminal according to claim 1, characterized in that a nickel plated layer (4) is disposed on the silver paste layer (3), a solder plated layer (5) is disposed on the nickel plated layer (4), and a solder paste layer (6) is disposed on the solder plated layer (5).

Claims

1. A glazing covered ferrite core electrode terminal comprising a ferrite core (1) and a silver paste layer (2), characterized in that

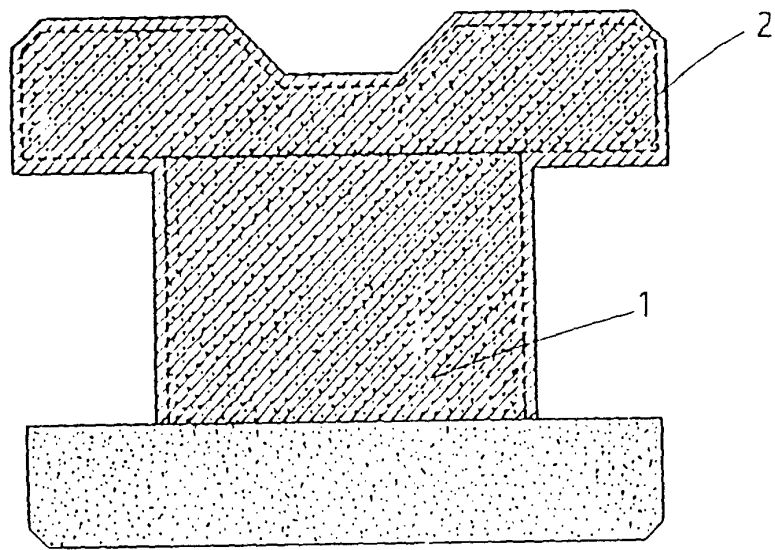


FIG. 1

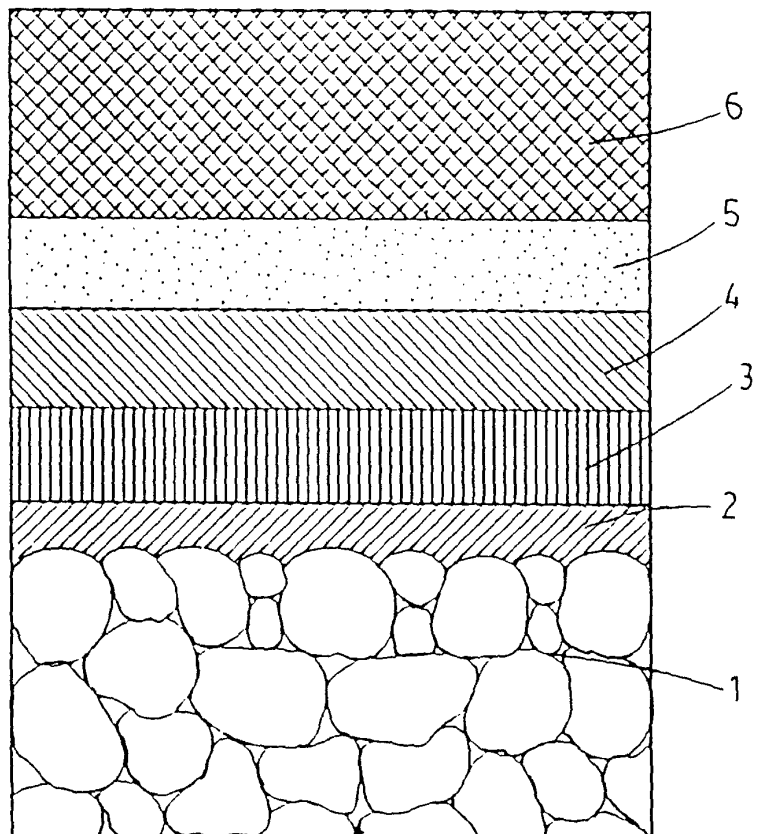


FIG. 2



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EUROPEAN SEARCH REPORT

Application Number
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Place of search THE HAGUE		Date of completion of the search 19 April 2001	Examiner Vanhulle, R
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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**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 00 12 5175

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