Title (en)

METHOD OF MANUFACTURING A MINIATURE ADJUSTABLE INDUCTANCE AND INDUCTANCE MADE BY THIS METHOD

Publication

EP 0043558 B1 19841031 (FR)

Application

EP 81105127 A 19810702

Priority

FR 8015244 A 19800709

Abstract (en)

[origin: EP0043558A1] 1. A method for manufacturing a miniature inductance which is adjustable by means of a ferromagnetic dip core and is sealed in a plastic material, method according to which a winding (5) of a wire coated with a thermoadhesive insulating material is spooled under hot air on a temporary mandrel, the temporary mandrel is withdrawn and a ferromagnetic rod (9) is realized having a smaller diameter than the winding (5) and bearing a headless screw (10) made of plastic material and moulded onto one of its ends, characterized in that the method further includes the steps of - manufacturing two contact pieces (1, 2) for the terminals (19, 20) of the winding (5), these pieces being definitely positioned one with respect to the other and constituting two opposite sides of a frame cut out of a metal strip, the two flanks of these sides being bent back onto the upper face of the strip and being attached to the residual frame by constrictions (17, 18) enabling their later separation, - tin-coating and bending the terminals (19, 20) of the winding (5), - locating the winding (5) on the frame, approximately in the definite position, and securing the terminals (19, 20) to the contact pieces (1, 2), - locating the winding in a mould having a parallelepipedic cavity (30) which is open on a face having smaller size than the frame and having two opposed lateral walls (37, 38) of the same distance as the distance between the contact pieces (1, 2) of a frame, this frame supporting the winding (5) which is located in the cavity (30) of the mould and being applied on the open face of this cavity, whereby the contact pieces (1, 2) project into the cavity (30) along said lateral walls (37, 38), - placing a bar (31) inside the mould cavity (30) through a lateral opening (39) aligned to the axis of the final position of the winding (5), the bar having a threaded zone (34) of a diameter and thread type adapted to those of the headless screw (10) which is moulded onto an end of the ferromagnetic rod (9), this zone being followed via a shoulder (33) by a smooth end stem (32), the diameter of which exceeds that of the ferromagnetic rod but is smaller than that of the winding (5) and which engages in the latter, the bar (31) providing an exact positioning of the winding (5) and a clearance space for the ferromagnetic rod (9) and for its headless screw (10), - filling the cavity (30) of the mould with a plastic filling material, - withdrawing the bar (31) by unscrewing after set-up of the plastic material, - unmoulding of the winding and mounting of the ferromagnetic rod (9) with its headless screw (10) in the recess left free by the bar (31).

IPC 1-7

H01F 41/02; H01F 41/00; H01F 41/10

IPC 8 full level

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CPC (source: EP)

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Cited by

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