

Title (en)  
Reactance with plunger-type magnetic core.

Title (de)  
Tauchkernspule mit einem Tauchkern.

Title (fr)  
Réactance à noyau plongeur.

Publication  
**EP 0053686 A1 19820616 (DE)**

Application  
**EP 81108653 A 19811021**

Priority  
DE 3045954 A 19801205

Abstract (en)  
1. A reactance for use as an earth-leakage breaker coil in supply networks, with a single plunger (5) arranged axially to one side of and adjustable in the axial direction in a winding (6) of circular cross-section which is embraced by outer return members (2) and yokes (3, 4) of an iron circuit, with a winding cylinder (7) which consists of insulating material, firmly clamped in the static part (2, 3, 4) of the iron circuit, and whose inside serves as a sliding track and guide for the free end of the plunger (5) which moves into the winding (6), and with a spindle (17) mounted on one side coaxial with the plunger (5) to drive the plunger (5), characterised in that - all those boundary surfaces of the static component (3) of the iron circuit which lie opposite the end of the winding (6) into which the plunger (5) enters lie outside of the space surrounded by the winding (6) ; - the spindle (17) which consists of metallic material does not project into the space between the plunger (5) and yokes (2) ; and - that end of the plunger (5) which projects out of the winding (6) and out of the static part (2, 3, 4) of the iron core is guided by spring-loaded rollers (14).

Abstract (de)  
Tauchkerne (5) sind üblicherweise axial einseitig angeordnet und in Achsrichtung verstellbar. Dabei greift der Tauchkern (5) in eine auf ihren Außenseiten von Rückschlußschenkeln (2) und Jochen (3, 4) eines Eisenkreises umfaßten Wicklung (6) ein. Erfindungsgemäß dient die Innenseite eines die Wicklung (6) tragenden Wickelzylinders (7) selbst als Gleitbahn und Führung für das in die Wicklung (6) eintauchende Ende des Tauchkernes (5) und sind Teilquerschnitte des Wickelleiters jeder Windung der Wicklung (6) wenigstens annähernd gleichmäßig über die gesamte Wicklungslänge verteilt.

IPC 1-7  
**H01F 29/10**

IPC 8 full level  
**H01F 29/10** (2006.01)

CPC (source: EP)  
**H01F 29/10** (2013.01)

Citation (search report)  
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