

Title (en)
DUAL-STAGE MAGNETIC EXCITATION HIGH-VOLTAGE PROPORTIONAL STANDARD APPARATUS AND ERROR COMPENSATION METHOD

Title (de)
ZWEISTUFIGE PROPORTIONALE HOCHSPANNUNGSSTANDARDVORRICHTUNG MIT MAGNETISCHER ERREGUNG UND FEHLERKOMPENSATIONSVERFAHREN

Title (fr)
APPAREIL STANDARD PROPORTIONNEL HAUTE TENSION D'EXCITATION MAGNÉTIQUE À DEUX ÉTAGES ET PROCÉDÉ DE COMPENSATION DES ERREURS

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Application
EP 19951933 A 20191211

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Abstract (en)
Provided are a dual-stage excitation high-voltage ratio standard apparatus and an error compensation method for the apparatus. The apparatus includes a first-stage iron core (C1), a second-stage iron core (C2), a proportional winding (N_{1e}), a proportional winding (N_{2e}), an excitation winding (N_{1e}), and an excitation winding (N_{2e}), where both the first-stage iron core (C1) and second-stage iron core (C2) are rectangular rings, and a rectangular ring of the first-stage iron core (C1) has a greater perimeter than a rectangular ring of the second-stage iron core (C2); the second-stage iron core (C2) is disposed outside the first-stage iron core (C1), and one side of the first-stage iron core (C1) is adjacent to one side of the second-stage iron core (C2); and the excitation winding (N_{1e}) and the excitation winding (N_{2e}) are wound on a side opposite to the side of the first-stage iron core (C1) adjacent to the second-stage iron core (C2), and the proportional winding (N_{1e}) and the proportional winding (N_{2e}) are wound on two adjacent sides of the first-stage iron core (C1) and the second-stage iron core (C2). The apparatus solves the problem that a highest voltage level of an existing dual-stage standard apparatus is low, thereby improving the accuracy of a single-stage standard apparatus at a high voltage.

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