Title (en)

DEVICE, ARRANGEMENT, AND METHOD FOR MEASURING AN AMPERAGE IN A PRIMARY CONDUCTOR THROUGH WHICH CURRENT FLOWS

Title (de)

VORRICHTUNG, ANORDNUNG UND VERFAHREN ZUR MESSUNG EINER STROMSTÄRKE IN EINEM STROMDURCHFLOSSENEN PRIMÄRLEITER

Title (fr)

DISPOSITIF, AGENCEMENT ET PROCÉDÉ PERMETTANT DE MESURER L'INTENSITÉ D'UN COURANT DANS UN CONDUCTEUR PRIMAIRE PARCOURU PAR UN COURANT

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Abstract (en)

[origin: WO2015071102A1] The invention relates to a device (100) for measuring an amperage in a primary conductor (1) through which current flows, which primary conductor generates a primary magnetic field (10). The device (100) comprises a magnetic-field-generating element (2), which produces a reference magnetic field (20), and comprises an element (3) sensitive to magnetic field angle, which element measures the orientation of a total magnetic field in space, which total magnetic field arises by superposing the primary magnetic field (10) and the reference magnetic field (20). The primary magnetic field (10) and the reference magnetic field (20) are not parallel to each other at the location of the element (3) sensitive to magnetic field angle. The amperage of the current flowing through the primary conductor (1) can be determined from the orientation of the total magnetic field in space. The invention further relates to an arrangement of a device (100) for measuring an amperage and to a method for measuring an amperage in a primary conductor (1) through which current flows.

IPC 8 full level

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