



Expoziția Internațională Specializată

INFOINVENT

Ediția a XVII-a, 17-20 Noiembrie 2021



TRANSFORMER DEVICE FOR INTERCONNECTION OF POWER SYSTEMS

Dr.Sc., Valeriu Bosneaga; col.st. Victor Suslov; Dr.Sc., Mihai Tîrșu; Dr.,Sc. Vladimir Anisimov

Goal:

Connection of adjacent three-phase alternating current power systems with different frequencies for parallel operation

Solution:

The transformer device consists of the main and additional three-phase autotransformers, the windings of the main autotransformer are connected in a hexagon ring circuit, and windings of an additional transformer are connected to the outputs of hexagon to regulate phase angle between systems for active power flow stabilization.

Advantages:

Parallel operation of the power systems increase the energy security of the country and make it possible to provide and maintain necessary power flow between the connected systems.

Stage:

Scientific research project, invention.

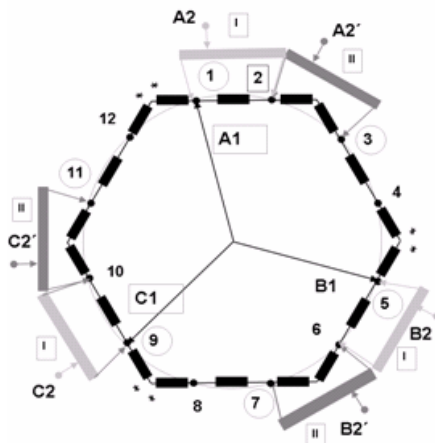


Fig.1. Schema convențională a dispozitivului, conține un AUTOTransformator trifazat cu 6 bobine în fiecare fază, conectate în hexagon (desenat cu negru) și un autotransformator trifazat de reglare a fazei, care poate fi conectat la borne diferite a hexagonului (aratat cu culoare sură)

