

Title (en)

PROCESS AND SYSTEM FOR DETERMINING THE STATES OF OPERATION OF AN ELECTRIC ENERGY SUPPLY NETWORK

Title (de)

ANORDNUNG UND VERFAHREN FÜR DIE BESTIMMUNG DER BETRIEBSZUSTÄNDE EINES ELEKTRISCHEN ENERGIEVERSORGUNGSNETZES

Title (fr)

PROCEDE ET SYSTEME PERMETTANT DE DETERMINER LES ETATS DE FONCTIONNEMENT D'UN RESEAU D'ALIMENTATION EN ENERGIE ELECTRIQUE

Publication

**EP 0826259 A1 19980304 (DE)**

Application

**EP 96914197 A 19960510**

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Abstract (en)

[origin: DE19518030C1] A process and system are disclosed for determining the states of operation of an electric energy supply network that transports, distributes and makes available electric energy to consumers. A number of neural networks is provided that corresponds to the number of characterising electrical properties of the nodes of an electric network. The neural networks have the same structure as the electric network and have neurones that correspond to the electric network nodes which are interconnected by synapses in the same way as the electric network nodes are interconnected. Their connections pass through dipoles and the synaptic weights may be set from the outside of the network at 0 or 1, depending on the corresponding positions of the dipoles. The scalar products of weighting vectors and input vectors of the neurones are compared to a threshold value equal to 1 and depending on whether the result of the comparison is higher than, equal to or less than 1, the neurones generate a 1 or a 0. The weights of the outputs of corresponding neurones in the individual neural networks are superimposed on each other depending on the priority of the characterising electrical properties.

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