ABSTRACT

Parallel-connected backup power sources (2), which are each connected on the input side via a choke coil (3) to an AC mains (5), in disconnectable fashion, and on the output side to a common load bus (4) and whose supplied powers are individually variable, are disconnected from the AC mains (5) in the event of a failure of the AC mains (5), at least if they are affected by the failure, and are successively reconnected to the AC mains (5) after the restoration of the AC mains (5). In this case, in order to match the powers supplied by the individual backup power sources (2) to one another, while some of the backup power sources (2) are connected on the input side to the AC mains (5) and others of the backup power sources (2) are not connected on the input side to the AC mains (5), a phase angle ($\Delta\phi$) between the AC mains (5) and the load bus (4) is determined, and the power supplied by each of the backup power sources (2) which have not yet been reconnected to the AC mains (5) is adjusted as a function of this phase angle ($\Delta\phi$).

(Figure 1)