CLAIMS

[Claim 1]

An active filter system comprising

a plurality of active filter devices (41, 42, 43) that each have an output connected to a harmonic-generating load device (2) and are capable of generating a compensating current for performing at least one of reduction of a harmonic current of the harmonic-generating load device (2) and improvement of a power factor of a fundamental wave, wherein

the plurality of active filter devices (41, 42, 43) provide two or more types of capacities,

the number and a combination of operating active filter devices among the active filter devices (41, 42, 43) change in accordance with a magnitude of the compensating current; and

the number and the combination of the operating active filter devices among the active filter devices (41, 42, 43) change so as to maximize a ratio of the compensating current relative to a total capacity of the operating active filter devices among the active filter devices (41, 42, 43).

[Claim 2]

The active filter system according to Claim 1, wherein

an active filter device having a large capacity among the active filter devices (41, 42, 43) is preferentially operated.

[Claim 3]

The active filter system according to Claim 1 or 2, wherein

when the compensating current exceeds or falls below a value of the compensating current corresponding to a total capacity of any combination among all combinations for selecting one or more active filter devices from among the plurality of active filter devices (41, 42, 43), the combination of the operating active filter devices among the active filter devices (41, 42, 43) changes.

[Claim 4]

The active filter system according to any of Claims 1 to 3, wherein

the harmonic-generating load device (2) is a power conversion device.

[Claim 5]

An air conditioning device comprising the active filter system according to any of Claims 1 to 4.