determine the highest, the lowest, the average or the median of a plurality of kinds of degradation levels as a final degradation level of the secondary battery 300. Comprehensive determination of the degradation level of a secondary battery 300 from degradation levels obtained from a plurality of aspects in this manner enables more reasonable calculation of the degradation level.

[0092] Permissible values of the degradation level of a secondary battery 300 (degradation thresholds) are considered as varying depending on users of the secondary battery 300. For example, a user A4 is assumed to use a secondary battery 300 with a degradation level of 0 to 10(%), and replaces the secondary battery 300 when the degradation level becomes higher than 10(%). A user A5 is assumed to use a secondary battery 300 with a degradation level of 0 to 30(%). In this case, the secondary battery 300 with a degradation level higher than 10(%) that can no longer be used by the user A4 is usable for the user A5. The aforementioned matching unit may notify the user A5 that the secondary battery 300 of the user A4 is available at the replacement timing of the secondary battery 300 of the user A4 or that the secondary battery 300 of the user A4 will be available at a timing when the replacement thereof is expected. Alternatively, the matching unit may deliver the secondary battery 300 that is no longer used by the user A4 to the user A5. When the user A4 replaces the secondary battery 300, the matching unit may search for a user who can use

CLAIMS

1. A secondary battery management device connected with electronic equipment via a communication network, the electronic equipment using a secondary battery as a driving power supply, the secondary battery management device comprising:

a performance information acquiring unit to acquire performance information of the secondary battery from the electronic equipment;

a degradation measuring unit to measure a degradation level of performance of the secondary battery during a predetermined unit period; and

a fee calculating unit to calculate a use fee of the secondary battery for the unit period depending on the degradation level, wherein

the performance information acquiring unit periodically acquires the performance information,

the degradation measuring unit measures the degradation level on the basis of changes in the periodically acquired performance information, and

the fee calculating unit calculates the use fee as a billed amount per the unit period.

2. The secondary battery management device according to claim 1, further comprising:

a degradation estimating unit to estimate a degradation level of the secondary battery at a predetermined future time point on the basis of the degradation level of the performance per unit period of the secondary battery.

3. The secondary battery management device according to claim 2, further comprising:

a fee estimating unit to estimate a use fee of the secondary battery for a predetermined unit period on the basis of the estimation of the degradation level of the secondary battery; and

a fee notifying unit to notify a user of the electronic equipment of the estimated use fee.

4. The secondary battery management device according to claim 2, further comprising:

a replacement estimating unit to estimate replacement timing of the secondary battery on the basis of the estimation of the degradation level of the secondary battery; and

a replacement notifying unit to notify a user of the electronic equipment of the estimated replacement timing.

5. The secondary battery management device according to claim 1, further comprising:

a use history acquiring unit to acquire use history of the electronic equipment from the electronic equipment; and

a degrading behavior specifying unit to refer to degradation history of the secondary battery and the use history, and specify a degrading behavior performed by a user of the electronic equipment from among a plurality of degrading behaviors defined as usage that degrades the secondary battery.

6. The secondary battery management device according to claim 1, wherein

the performance information acquiring unit acquires, as the performance information, a discharge capacity of the secondary battery, and

the degradation measuring unit measures, as the degradation level, a decrease in the discharge capacity during the unit period.

7. The secondary battery management device according to claim 1, wherein

the fee calculating unit calculates the use fee depending on a type of the secondary battery on the basis of both a purchase price and a degradation threshold of the secondary battery.

8. A secondary battery management program causing a computer to implement:

a performance information acquiring function of

acquiring performance information of a secondary battery from electronic equipment using the secondary battery as a driving power supply;

a degradation level measuring function of measuring a degradation level of performance of the secondary battery during a predetermined unit period; and

a fee calculating function of calculating a use fee of the secondary battery for the unit period depending on the degradation level, wherein

the performance information acquiring function regularly acquires the performance information,

the degradation measuring function measures the degradation level on the basis of changes in the regularly acquired performance information, and

the fee calculating function calculates the use fee as a billed amount per the unit period.