

## Cargador rápido para baterías

Una PYME española ha desarrollado un nuevo cargador rápido para baterías que, dependiendo de su potencia, ofrece la intensidad más alta, que es alrededor de un tercio de la capacidad de la batería (según la temperatura de la misma). Este cargador produce una intensidad de corriente no sólo más plana sino también menos rizada que otros cargadores convencionales, lo que implica una durabilidad mayor. La empresa busca socios para establecer un acuerdo de licencia.

Tipo: Oferta

Referencia: 12060608

IRC: IRC CENEMES

Inscripción: 12/06/2006

Fecha límite: 08/05/2007

Sectores: 4001 Almacenamiento y transporte de energía

Title-----

New TO - Fast Battery Charger

Reference

-----  
06 ES SERT 0EVZ

Last update

-----  
Tue, May, 09, 2006

Deadline

-----  
Tue, May, 08, 2007

Abstract

-----  
A Spanish SME has developed an innovative fast battery charger that, depending on its power, brings the highest intensity, which is around one third of the battery's capacity (according to the battery's temperature). This charger produces a current intensity not only flatter but also less curled than any other conventional charger, which involves a longer working life. The company is looking for partners to establish a license agreement.

Description

-----  
The new battery charger developed, due to its design, not only provides high yield when charging, but also the charging process is carried out at high speed. Depending on its power, the charger brings the highest intensity, which is around one third of the battery's capacity, according to the battery's temperature.

## Cargador rápido para baterías

This charger uses all the voltage as charging voltage, so the overloading prevention control is carried out by controlling the voltage in the battery terminals.

The main characteristic of the charger is reduction of the charging time to one third when compared to a conventional charger. This fast charger charges in three hours a battery that would require nine hours with a conventional charger, including the charge of equalisation of the vessels of the battery.

The charger produces a current intensity not only flatter but also less curled than any other conventional charger, which involves a longer working life. Due to these features the charging process takes place in a very efficient way without producing excessive heat in the battery, which can reduce its durability.

The battery charger is adaptable, which means it is applicable for all battery types. Depending on the type of battery its technical characteristics such as input voltage, frequency, dimension, weight, etc, vary.

Several trials have been carried out in order to compare the new charger with a conventional one. For this purpose, two identical batteries were charged each one with each charger, and the result is:

- The charging time using the new charger is 3.5 hours while using the conventional one takes 7.2 hours.
- Concerning the state of the batteries in relation with the charge rate, after a number of cycles, both batteries remain in good condition and the ageing is similar in both.
- Concerning the harmonic distortion of the current provided to the charger, the new charger presents a lower content of harmonics for all the currents, including at maximum intensity. The harmonic distortion rate is 9.26 % for the new charger and 29.8 % for the reference one.
- The charger yield is of a similar magnitude in both chargers.

Furthermore, this charger has an information storage system that allows registering the charge operations of each battery; besides, it can identify them through a bar code reader.

To provide added value, there is also a system available to manage the information and the interaction between the worker and charger. The information deals with the way of charging, the date of the last charging, percentage of the charge used, number of chargings, etc. In this way the companies could carry out predictive maintenance of the batteries.

### Innovative Aspects:

The innovation deals with the reduction to one-third the normal charging time.

### Main Advantages:

- Compared to a conventional charger, this one reduces to one third the normal time of charge
- Useful for any battery or energy accumulator
- Battery's longer working life