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ARRANGEMENT AND METHOD FOR THE INDIVIDUAL GUIDANCE OF VEHICLES TO A CHARGING STATION WITH DISPLAY CONCEPT

Axel Unger
Bertrandt Ingenieurbüro GmbH

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ARRANGEMENT AND METHOD FOR THE INDIVIDUAL GUIDANCE OF VEHICLES TO A CHARGING STATION WITH DISPLAY CONCEPT

Initial situation:

If a customer wants to charge his e-vehicle, it is not known exactly at which charging station he will do so.

Disadvantage:

When setting up a group-wide charging station network, it is difficult to differentiate between the vehicle brands involved. The owner of a vehicle of a certain brand must charge at the same charging station (possibly with a different group emblem) as the owner of a vehicle of another group brand. This could reduce acceptance, especially among premium customers.

Solution:

An individual, changeable emblem (digital, hologram, real sculpture) of the respective vehicle brand can be displayed at each charging pole. This information is exchanged via communication between the vehicle and the charging pole/charging network and then displayed directly on the charging pole. This ensures direct identification between the vehicle owner and the respective charging pole by displaying the individual emblem at the time of the desired charging process. In addition, guidance can be provided by vehicle navigation systems.

The display can then take the form of images on LED screens, holograms or similar.

In this way, an existing charging network can be used and many brands can thus enable premium refuelling/charging. Furthermore, an advance reservation by displaying the emblem at the charging station would also be conceivable, where the (premium) customer can use the charging station for the duration of the charging process by means of predictive navigation information at a certain arrival time at the charging station (possibly to be realised for an additional charge). This can avoid long waits due to occupied charging stations.

Advantages:

- Guidance of a vehicle to the "right" charging pole.
- Premium comfort -> charging pole available, functional...
- Setting and planning of individual characteristics such as charging power etc.
- Establishment of only one charging network and use for many vehicle brands
- Advance reservation of the charging pole by the customer possible (possibly to be realised for an additional charge)
- Waiting times due to occupied charging points can be avoided

Technical implementation:

Recognition/communication of cars with charging station

- Charging demand -> reservation of space
- Display of own vehicle brand
 - Charging points can display various associated vehicle brands
 - Display as emblem, statue, etc.
 - Switch between different displays
 - Guidance of the car to the correct charging point

Premium feeling when charging

- Provision of additional features (charging power, etc.)