QUICK-CHANGE UNIT - BATTERY FOR VEHICLE

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QUICK-CHANGE UNIT - BATTERY FOR VEHICLE WITH E-DRIVE

**Technical task:**
The task of the technical innovation is to make vehicles with electric drive through quick-change units more flexible by being able to insert additional batteries and thereby generate more range.

**Initial situation:**
Electric vehicles have batteries or rechargeable battery units that are permanently connected or mounted to the vehicle. These necessary energy storage devices are designed in operation so that they can be fully recharged for a longer period of time required (night time, parking time, etc.).

**Solution:**
It is proposed to place a battery unit in such a way that this energy source can be removed from a vehicle via quick-change devices, if necessary with swing-out roll stands, without any special effort, and replaced accordingly quickly with a fully charged unit. The swing-out roll stands are part of the replaceable battery or a separate role table part, which can be carried, but does not have to.

If necessary, different sized battery units (depending on the route) should be available. To protect is a drawer volume, which can be used by correspondingly different sized space, and possibly thereby reduced trunk (adjustable floor height), as the user chooses

- Small battery volume for the short haul with little weight.
- Large battery volume with smaller usable trunk space, but larger Range for a long-distance journey.

The drawer is at the front, rear or side of the vehicle.

**Advantages:**
- A construction of the energy storage device in the vehicle, which makes it possible to acquire and use a separate second energy source (possibly also different sizes), represents a considerable advantage.

**Possible application:**
- Vehicles with electric drive.