CLAIMS

1. An inductive charging assembly for a vehicle, the inductive charging assembly comprising

a transmitter comprising a primary coil for generating an alternating magnetic field,

a receiver comprising a secondary coil with a secondary magnetic core for charging a battery of the vehicle when the alternating magnetic field induces an alternating electrical current in the secondary coil, the secondary coil being provided around the secondary magnetic core, wherein

the inductive charging assembly further comprises a pair of movable connection magnetic cores, wherein the secondary magnetic core comprises a secondary magnetic plate, the secondary magnetic plate comprises a plurality of areas for coupling electromagnetically with the movable connection magnetic cores, wherein the movable connection magnetic cores are movable essentially in a vertical direction,

wherein the movable connection magnetic cores are movable between a charging position and a standby position, in the charging position, the movable connection magnetic cores are provided in the vicinity of the primary coil and are provided in the vicinity of the secondary magnetic core such that the alternating magnetic field extends between the movable connection magnetic cores and the secondary magnetic core.

2. The inductive charging assembly according to claim 1, wherein,

in the standby position, the movable connection magnetic cores are retracted into the vehicle.

3. The inductive charging assembly according to claim 1, wherein,
in the standby position, the movable connection magnetic cores are retracted into the ground of the charging station.

4. A vehicle comprising
a receiver comprising a secondary coil with a secondary magnetic core for charging a battery of the vehicle, the secondary coil being provided around the secondary magnetic core, and
a pair of movable connection magnetic cores,
wherein the secondary magnetic core comprises a secondary magnetic plate, the secondary magnetic plate comprises a plurality of areas for coupling electromagnetically with the movable connection magnetic cores, wherein the movable connection magnetic cores are movable essentially in a vertical direction,
wherein the movable connection magnetic cores are movable between a charging position and a standby position,
in the standby position, the movable connection magnetic cores are retracted into the vehicle, and
in the charging position, the movable connection magnetic cores are for providing in the vicinity of a magnetic field transmitter for receiving an alternating magnetic field from the magnetic field transmitter and are provided in the vicinity of the secondary magnetic core, such that the alternating magnetic field extends between the movable connection magnetic cores and the secondary magnetic core.

5. The vehicle according to claim 4, wherein,

in the charging position, the movable connection magnetic cores are provided in the vicinity of ends of the secondary magnetic core.

6. The vehicle according to claim 4, wherein the secondary coil is provided in a bottom part of the vehicle.