

C l a i m s

1. A charging assembly (100) for charging an electric vehicle (400), the charging assembly (100) comprising an electrical socket (101) and a charging station (102),
 - 5 wherein the electrical socket (101) is configured for receiving the charging station (102) and for connecting the charging station (102) to a specific branch (220, 220-1, 220-2) of an electric vehicle supply installation (500), wherein the electric vehicle supply installation (500) comprises a fuse cabinet (200) and at least one branch (220, 220-1, 220-2) connected to the fuse cabinet (200),
 - 10 wherein the electrical socket (101) comprises a data storage medium (103) readable by the charging station (102),
 - wherein the data storage medium (103) is configurable with a data field for representing a maximum electrical current that can be drawn from the fuse cabinet (200) by said specific branch (220, 220-1, 220-2), and optionally a data field for representing a maximum electrical current that
 - 15 can be drawn by the charging station (102) from the specific branch (220, 220-1, 220-2) via the electrical socket (101), and
 - wherein the charging station (102) is configured for being coupled to the electrical socket (101) to be coupled to the specific branch (220, 220-1, 220-2) of the electric vehicle supply installation (500), wherein the charging station (102) is configured for reading the data storage
 - 20 medium (103) including the data fields and for accordingly adapting the way current is drawn from the branch (220, 220-1, 220-2) and provided to the electric vehicle (400).
2. The charging assembly (100) according to claim 1, wherein the adapting of the way current is drawn from the branch (220, 220-1, 220-2) comprises adapting the amount of electrical current
 - 25 that is drawn from the branch (220, 220-1, 220-2), and/or adapting the electric phase the electrical current is drawn from the branch (220, 220-1, 220-2).
3. The charging assembly (100) according to claim 1 or 2, wherein the data storage medium (103) is configurable with:
 - 30 - a data field for identifying the specific branch (220, 220-1, 220-2) of the electric vehicle supply installation (500) and
 - a data field for identifying the connection of the electrical socket (101) to the specific branch (220, 220-1, 220-2).
- 35 4. The charging assembly (100) according to claim 1, 2 or 3, further comprising a communication unit for establishing a communication link with other charging stations (102-1, 102-3) in the electric vehicle supply installation (500) for the purpose of one of the following:
 - attributing unique identifiers to charging stations (102-1, 102-3) in a branch (220, 220-1,

- 220-2),
- electing one coordinator/master charging station (102-1), and
 - coordinating between the charging stations (102-1, 102-3) which amount of electrical current may be drawn and/or which electric phase is to be used by each one.
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5. The charging assembly (100) according to claim 4, wherein the communication unit is located in the charging station (102), in the electrical socket (101) or in both parts.
6. The charging assembly (100) according to claim 5, wherein the communication unit is connectable to a communication circuit wired in the electric vehicle supply installation (500).
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7. The electrical socket (101) in the charging assembly (100) according to any one of claims 1 to 6.
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8. Electrical socket (101) according to claim 7, wherein the data field for identifying the connection is suitable for identifying a position in series in the branch (220, 220-1, 220-2).
9. Electrical socket (101) according to any of the claims 7 to 8, comprising an electrical connector (104) for connecting a pin of the charging station (102) to the branch (220, 220-1, 220-2).
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10. Electrical socket (101) according to claim 9, comprising a slot for receiving the pin of the charging station (102), wherein the electrical connector (104) is inside the slot.
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11. Electrical socket (101) according to any of the claims 7 to 10, wherein the electrical socket (101) is adapted for holding the charging station (102) in a wall-mounted position.
12. Electrical socket (101) according to claim 11, comprising a J-slot for fastening the charging station (102) to the electrical socket.
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13. Electrical socket (101) according to any of the claims 9 to 12, wherein the electrical connector (104) is arranged so that the pin of the charging station (102) in a wall-mounted position faces the wall.
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14. Electrical socket (101) according to any of the claims 7 to 13, wherein the data storage medium (103) is configurable with a data field for representing a unique identifier of the electrical socket (101).

15. Electrical socket (101) according to any of the claims 7 to 14, wherein the data storage medium (103) is wirelessly readable.
16. Electrical socket (101) according to claim 15, wherein the data storage medium (103) is an RFID tag.
17. Electrical socket (101) according to any of the claims 7 to 14, wherein the data storage medium (103) is optically readable.
18. Electrical socket (101) according to claim 17, wherein the data storage medium (103) is a barcode.
19. Electrical socket (101) according to any of the claims 7 to 18, wherein the electrical socket (101) is adaptable to mechanically lock the charging station (102) to the electrical socket (101).
20. The charging station (102) in the charging assembly (100) according to any one of claims 1 to 6.
21. Charging station (102) according to claim 20, comprising a pin arranged for being received by an electrical connector (104) of the electrical socket (101).
22. Charging station (102) according to claim 20 or 21, comprising a flap for sliding into a J-slot of the electrical socket (101) and fastening the charging station (102) to the electrical socket (101).
23. Charging station (102) according to any of the claims 20 to 22, comprising a socket (1060, 1061) for plugging in an electric cable plug to the charging station (102).