

CLAIMS

1. A communication network node comprising circuitry configured to:
request a home mobility service provider to allow a roaming mobility service for a passenger
which is located in a mobility service area of a roaming mobility service provider.
- 5 2. The communication network node of claim 1, wherein the requesting is based on a detection
of the passenger in the mobility service area of the roaming mobility service provider.
3. The communication network node of claim 2, wherein the detection is based on at least one
of a mobile country code, geo-fencing, an external trigger, and a booking history.
4. The communication network node of claim 1, the circuitry being further configured to:
10 perform a social login to the roaming mobility service provider.
5. The communication network node of claim 1, wherein the allowing of a roaming mobility
service is based on an identifier.
6. The communication network node of claim 5, wherein the identifier is a decentralized identi-
fier.
- 15 7. The communication network node of claim 5, wherein the identifier is a self-sovereign iden-
tity.
8. A method for controlling a communication network node comprising:
requesting a home mobility service provider to allow a roaming mobility service for a passen-
ger which is located in a mobility service area of a roaming mobility service provider.
- 20 9. The method of claim 8, further comprising:
performing a social login to the roaming mobility service provider.
10. A communication network node comprising circuitry configured to:
request a decentralized database to provide a credential of a passenger, wherein the creden-
tial is generated based on a decentralized identifier of the passenger, wherein the decentral-
25 ized identifier is generated based on a request of a user equipment to the decentralized database for allowing
the passenger to use a mobility service of a roaming mobility service provider.
11. The communication network node of claim 10, wherein the decentralized database is based
on a distributed ledger.
12. The communication network node of claim 11, wherein the distributed ledger is a block-
30 chain.
13. A user equipment comprising circuitry configured to:

- issue a generation of a decentralized identifier of a passenger; and
receive a credential of the passenger for allowing the passenger to use a mobility service of a roaming mobility service provider, wherein the credential is generated based on a request of a home mobility service provider to a decentralized database and based on the decentralized identifier.
- 5 14. The user equipment of claim 13, wherein the decentralized database is based on a distributed ledger.
15. The user equipment of claim 14, wherein the distributed ledger is a blockchain.
16. A communication network for providing a distributed ledger comprising a plurality of network nodes for authenticating a passenger to a roaming mobility service provider comprising circuitry configured to:
- 10 provide a decentralized identifier of the passenger in a decentralized database based on a request of a user equipment;
provide a credential of the passenger in the decentralized database based on a request of a home mobility service provider and based on the decentralized identifier; and
- 15 transmit the credential to the user equipment for allowing the passenger to use a mobility service of a roaming mobility service provider.
17. The communication network of claim 16, wherein the decentralized database is based on a distributed ledger.
18. The communication network of claim 17, wherein the distributed ledger is a blockchain.
- 20 19. A method for controlling a communication network for providing a distributed ledger comprising a plurality of network nodes for authenticating a passenger to a roaming mobility service provider comprising:
- providing a decentralized identifier of the passenger in a decentralized database based on a request of a user equipment;
- 25 providing a credential of the passenger in the decentralized database based on a request of a home mobility service provider and based on the decentralized identifier; and
transmitting the credential to the user equipment for allowing the passenger to use a mobility service of a roaming mobility service provider.
20. A communication network node comprising circuitry configured to:
- 30 receive a credential of a passenger, wherein the credential is generated based on a request of a home mobility service provider to a decentralized database and based on a decentralized identifier of the passenger;

receive the decentralized identifier in response to transmitting the credential to a database;
and

verify the passenger based on the decentralized identifier for allowing the passenger to use a mobility service of a roaming mobility service provider.

5 21. The communication network node of claim 20, wherein the verifying is based on a token.

22. The communication network node of claim 21, wherein the token is based on a public key encryption of the decentralized identifier.

23. A user equipment comprising circuitry configured to:

transmit a credential of a passenger, wherein the credential is generated based on a request of
10 a home mobility service provider to a decentralized database and based on a decentralized identifier of the passenger;

receive a token, wherein the token is based on an encryption of the decentralized identifier;
and

decrypt the token for verifying the passenger to a roaming mobility service provider for al-
15 lowing the passenger to use a mobility service of the roaming mobility service provider.

24. The user equipment of claim 23, wherein the encryption is a public-key encryption.

25. A communication network for providing a distributed ledger comprising a plurality of network nodes for authenticating a passenger to a roaming mobility service provider comprising circuitry configured to:

20 provide a token, wherein the token is based on an encryption of a decentralized identifier of the passenger; and

decrypt the token for verifying the passenger to a roaming mobility service provider for allowing the passenger to use a mobility service of the roaming mobility service provider.

26. The communication network of claim 25, wherein the distributed ledger is based on a blockchain.
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27. A communication network node comprising circuitry configured to:

allow a passenger to use a mobility service of a roaming mobility service provider based on a credential of the passenger and based on a mutual agreement of the roaming mobility service provider and a home mobility service provider, wherein the credential is generated based on a request of
30 the home mobility service provider to a decentralized database and based on a decentralized identifier of the passenger.

28. A method for controlling a communication network node comprising:

allowing a passenger to use a mobility service of a roaming mobility service provider based on a credential of the passenger and based on a mutual agreement of the roaming mobility service provider and a home mobility service provider, wherein the credential is generated based on a request of the home mobility service provider to a decentralized database and based on a decentralized identifier of the passenger.

29. A communication network node comprising circuitry configured to:
store a plurality of credentials of a passenger, wherein the plurality of credentials is generated based on a request of a home mobility service provider to a decentralized database and based on a decentralized identifier of the passenger; and
transmit at least one credential of the plurality of credentials to a user equipment for allowing the passenger to use a mobility service of a roaming mobility service provider.

30. A method for controlling a communication network node comprising:
storing a plurality of credentials of a passenger, wherein the plurality of credentials is generated based on a request of a home mobility service provider to a decentralized database and based on a decentralized identifier of the passenger; and
transmitting at least one credential of the plurality of credentials to a user equipment for allowing the passenger to use a mobility service of a roaming mobility service provider.