CLAIMS

1. A method of controlling a station, the method comprising:

   transmitting a polling signal to an access point;

   receiving a first signal from the access point in response to the polling signal, the first signal comprising information indicating a time period;

   deactivating the station after receiving the first signal and before expiry of the time period; and

   activating the station upon expiry of the time period.

2. The method according to claim 1,

   wherein the station is activated upon expiry of the time period to receive a second signal from the access point.

3. The method according to claim 2,

   wherein the second signal is one signal of a prescheduled series of periodic signals.

4. The method according to claim 2 or 3,

   wherein the time period is indicated by a duration between transmitting of the first signal from the access point and transmitting of the second signal from the access point.

5. The method according to any one of claims 2 to 4,

   wherein the second signal comprises a traffic indication map.

6. The method according to any one of claims 2 to 4,

   wherein the second signal comprises a traffic indication map segment.

7. The method according to claim 2,
wherein the second signal comprises buffered data.

8. The method according to any one of claims 2 to 4,
wherein the second signal comprises an indication for the station to transmit a subsequent polling signal to the access point.

9. The method according to claim 8, the method further comprising:
transmitting the subsequent polling signal to the access point; and
receiving a data signal comprising buffered data from the access point.

10. The method according to any one of claims 2 to 4,
wherein the second signal comprises an indication for the station to be awake to receive a data signal.

11. The method according to any one of claims 1 to 10,
wherein the polling signal is a prior Powersave-Poll signal.

12. The method according to any one of claims 1 to 10,
wherein the polling signal is a trigger frame.

13. The method according to claim 1,
wherein the station is activated upon expiry of the time period to transmit a second signal to the access point.

14. The method according to any one of claims 2 to 4 and 13,
wherein the second signal is an authentication request signal.

15. The method according to any one of claims 2 to 4, 13 and 14,

wherein the first signal is a probing response signal.

16. The method according to any one of claims 2 to 4 and 13 to 15,

wherein the polling signal is a prior probing request signal.

17. The method according to any one of claims 2 to 4 and 13 to 16, further comprising:

transmitting a third signal to the access point, wherein the third signal is an authentication request signal.

18. A method of controlling an access point, the method comprising:

receiving a polling signal from a station;

determining a time period;

transmitting a first signal to the station in response to the polling signal, the first signal comprising information indicating the time period; and

processing a second signal upon expiry of the time period.

19. The method according to claim 18,

wherein processing the second signal comprises transmitting the second signal.

20. A method of communication between an access point and a plurality of stations, the method comprising:

transmitting a polling signal from one or more stations of the plurality of stations to the access point;

transmitting a first signal from the access point to the plurality of stations in

response to the polling signal, the first signal comprising information indicating a time period;

deactivating the plurality of stations after the plurality of stations receives the first signal but before expiry of the time period; and

activating the plurality of stations upon expiry of the time period.

21. The method according to claim 20,

wherein the plurality of stations is activated upon expiry of the time period to receive a second signal from the access point.

22. The method of communication according to claim 21,

wherein the second signal comprises an indication of one or more stations of the plurality of stations to transmit a subsequent polling signal to the access point.

23. A station comprising:

a transmitting circuit configured to transmit a polling signal to an access point;

a receiving circuit configured to receive a first signal from the access point in response to the polling signal, the first signal comprising information indicating a time period;

a deactivation circuit configured to deactivate the station after receiving the first signal and before expiry of the time period; and

an activation circuit configured to activate the station upon expiry of the time period.

24. An access point comprising:

a receiving circuit configured to receive a polling signal from a station;

a transmitting circuit configured to transmit a first signal to the station in response to the polling signal, the first signal comprising information indicating a time period; and

a further circuit configured to process a second signal upon expiry of the time period.

25. A communication system comprising:

an access point; and

a plurality of stations;

wherein one or more stations of the plurality of stations are configured to transmit a polling signal to the access point;

wherein the access point is configured to transmit a first signal to the plurality of stations in response to the polling signal, the first signal comprising information indicating a time period;

wherein the plurality of stations is configured to be deactivated after the plurality of stations receives the first signal but before expiry of the time period; and

wherein the plurality of stations is configured to be activated upon expiry of the time period.

26. The method according to any one of claims 2 to 4,

wherein the polling signal is a probe request signal, the first signal from the access point is a probe response signal, and the second signal comprises an indication for the station to transmit an authentication request signal to the access point.

CLAIMS

1. A method of controlling a station, the method comprising:

   transmitting a polling signal to an access point;

   receiving a first signal from ~~an~~the access point in response to the polling signal, the first signal comprising information indicating a time period;

   deactivating the station after receiving the first signal and before expiry of the time period; and

   activating the station upon expiry of the time period.

2. The method according to claim 1,

   wherein the station is activated upon expiry of the time period to receive a second signal from the access point.

3. The method according to claim 2,

   wherein the second signal is one signal of a prescheduled series of periodic signals.

4. The method according to claim 2 or 3,

   wherein the time period is indicated by a duration between transmitting of the first signal from the access point and transmitting of the second signal from the access point.

5. The method according to any one of claims 2 to 4,

   wherein the second signal comprises a traffic indication map.

6. The method according to any one of claims 2 to 4,

   wherein the second signal comprises a traffic indication map segment.

7. The method according to claim 2,
wherein the second signal comprises buffered data.

8. The method according to any one of claims 2 to 4,
wherein the second signal comprises an indication for the station to transmit a subsequent polling signal to the access point.

9. The method according to claim 8, the method further comprising:
transmitting the subsequent polling signal to the access point; and
receiving a data signal comprising buffered data from the access point.

10. The method according to any one of claims 2 to 4,
wherein the second signal comprises an indication for the station to be awake to receive a data signal.

~~11. The method according to any one of claims 2 to 10, the method further comprising:~~
~~transmitting a prior polling signal to the access point.~~

~~12~~11. The method according to any one of claims 1 to 10~~11~~,
wherein the ~~prior~~ polling signal is a prior Powersave-Poll signal.

~~13~~12. The method according to any one of claims 1 to 10~~11~~,
wherein the ~~prior~~ polling signal is a trigger frame.

~~14~~13. The method according to claim 1,
wherein the station is activated upon expiry of the time period to transmit a

second signal to the access point.

~~15~~14. The method according to any one of claims 2 to 4 and ~~14~~13, wherein the second signal is an authentication request signal.

~~16~~15. The method according to any one of claims 2 to 4, ~~14~~13 and ~~15~~14, wherein the first signal is a probing response signal.

~~17~~16. The method according to any one of claims 2 to 4 and ~~14~~13 to ~~16~~15, ~~further comprising:~~

wherein the polling signal is ~~transmitting~~ a prior probing request signal ~~to the access point~~.

~~18~~17. The method according to any one of claims 2 to 4 and ~~14~~13 to ~~17~~16, further comprising:

transmitting a third signal to the access point, wherein the third signal is an authentication request signal.

~~19~~18. A method of controlling an access point, the method comprising:

receiving a polling signal from a station;

determining a time period;

transmitting a first signal to ~~a~~the station in response to the polling signal, the first signal comprising information indicating the time period; and

processing a second signal upon expiry of the time period.

~~20~~19. The method according to claim ~~19~~18, wherein processing the second signal comprises transmitting the second signal.

~~21. The method according to claim 19 or 20, the method further comprising:~~

~~receiving a prior polling signal transmitted from the station; and~~

~~determining whether to transmit the first signal.~~

~~22~~20. A method of communication between an access point and a plurality of stations, the method comprising:

transmitting a polling signal from one or more stations of the plurality of stations to the access point;

transmitting a first signal from ~~an~~the access point to ~~a~~the plurality of stations in response to the polling signal, the first signal comprising information indicating a time period;

deactivating the plurality of stations after the plurality of stations receives the first signal but before expiry of the time period; and

activating the plurality of stations upon expiry of the time period.

~~23~~21. The method according to claim ~~22~~20,

wherein the plurality of stations is activated upon expiry of the time period to receive a second signal from the access point.

~~24~~22. The method of communication according to claim ~~23~~21,

wherein the second signal comprises an indication of one or more stations of the plurality of stations to transmit a subsequent polling signal to the access point.

~~25~~23. A station comprising:

a transmitting circuit configured to transmit a polling signal to an access point;

a receiving circuit configured to receive a first signal from ~~an~~the access point in response to the polling signal, the first signal comprising information indicating a time period;

a deactivation circuit configured to deactivate the station after receiving the first signal and before expiry of the time period; and

an activation circuit configured to activate the station upon expiry of the time period.

~~26~~24. An access point comprising:

a receiving circuit configured to receive a polling signal from a station;

a transmitting circuit configured to transmit a first signal to ~~a~~the station in response to the polling signal, the first signal comprising information indicating a time period; and

a further circuit configured to process a second signal upon expiry of the time period.

~~27~~25. A communication system comprising:

an access point; and

a plurality of stations;

wherein one or more stations of the plurality of stations are configured to transmit a polling signal to the access point;

wherein the access point is configured to transmit a first signal to the plurality of stations in response to the polling signal, the first signal comprising information indicating a time period;

wherein the plurality of stations is configured to be deactivated after the plurality of stations receives the first signal but before expiry of the time period; and

wherein the plurality of stations is configured to be activated upon expiry of

the time period.

26. The method according to any one of claims 2 to 4,

wherein the polling signal is a probe request signal, the first signal from the access point is a probe response signal, and the second signal comprises an indication for the station to transmit an authentication request signal to the access point.