WHAT IS CLAIMED IS:

1. A method for reporting terminal capability information, performed by a terminal, the method comprising:

sending (21), to a first base station, ~~reporting~~ first terminal capability information for group paging;

wherein the first terminal capability information ~~is at least configured to~~ indicates ~~that~~whether or not the terminal supports ~~or does not support~~ paging the terminal by the group paging~~in a group paging manner~~.

~~2. The method according to claim 1, wherein the first terminal capability information is further configured for a network to determine grouping information for paging the terminal in the group paging manner.~~

~~3. The method according to claim 2, wherein the first terminal capability information comprises at least one of:~~

~~first information for indicating a capability that the terminal supports or does not support paging the terminal in the group paging manner;~~

~~second information for indicating a capability that the terminal supports or does not support grouping according to a statistical probability value of the terminal being paged; or~~

~~third information for indicating a capability that the terminal supports or does not support grouping according to a probability level of a statistical probability value of the terminal being paged.~~

~~4. The method according to claim 1, wherein reporting the first terminal capability information for the group paging comprises:~~

~~reporting the first terminal capability information of the terminal in different radio resource control (RRC) non-connected states, wherein the RRC non-connected states comprise an RRC idle state and/or an RRC inactive state.~~

~~5. The method according to claim 4, wherein the first terminal capability information of the terminal in the RRC idle state is the same as the first terminal capability information of the terminal in the RRC inactive state.~~

~~6~~2. The method according to claim 1, wherein ~~reporting~~ sending (21) the first terminal capability information for the group paging comprises:

sending (41), to the first base station, ~~reporting~~ a terminal capability report message for indicating the first terminal capability information~~; or~~

~~reporting a terminal assistance information message for indicating the first terminal capability information~~.

~~7. The method according to claim 6, wherein in response to a desired state indicated by the terminal assistance information message being a radio resource control (RRC) idle state, the first terminal capability information is terminal capability information of the terminal in the RRC idle state; or~~

~~in response to a desired state indicated by the terminal assistance information message being an RRC inactive state, the first terminal capability information is terminal capability information of the terminal in the RRC inactive state; or~~

~~in response to a desired state indicated by the terminal assistance information message being an RRC non-connected state, the first terminal capability information is terminal capability information of the terminal in the RRC non-connected state, wherein the RRC non-connected state comprises an RRC idle state and an RRC inactive state.~~

~~8~~3. The method according to claim 1 or 2, further comprising:

receiving (51) second terminal capability information for the group paging ~~from~~ sent ~~a~~by the first base station;

wherein the second terminal capability information indicates whether or not the first base station supports paging the terminal by the group paging~~is at least configured to indicate that the first base station supports or does not support paging the terminal in the group paging manner~~.

~~9. The method according to claim 8, further comprising:~~

~~determining that the terminal does not support paging the terminal in the group paging manner, or determining that the first base station does not support paging the terminal in the group paging manner according to the second terminal capability information; and~~

~~determining to receive a paging message according to preset grouping.~~

~~10~~4. A method for reporting terminal capability information, performed by a first base station, the method comprising:

receiving (71), from a terminal, first terminal capability information for group paging;

wherein the first terminal capability information ~~is at least configured to~~ indicates ~~that~~whether or not ~~a~~the terminal supports ~~or does not support~~ paging the terminal in a group paging manner.

~~11. The method according to claim 10, further comprising:~~

~~determining grouping information for paging the terminal in the group paging manner according to the first terminal capability information.~~

~~12. The method according to claim 11, wherein the first terminal capability information comprises at least one of:~~

~~first information for indicating a capability that the terminal supports or does not support paging the terminal in the group paging manner;~~

~~second information for indicating a capability that the terminal supports or does not support grouping according to a statistical probability value of the terminal being paged; or~~

~~third information for indicating a capability that the terminal supports or does not support grouping according to a probability level of a statistical probability value of the terminal being paged.~~

~~13. The method according to claim 10, wherein receiving the first terminal capability information for the group paging comprises:~~

~~receiving the first terminal capability information of the terminal in different radio resource control (RRC) non-connected states, wherein the RRC non-connected states comprise an RRC idle state and/or an RRC inactive state.~~

~~14. The method according to claim 10, wherein the first terminal capability information reported in the RRC idle state is the same as the first terminal capability information reported in the RRC inactive state.~~

~~15~~5. The method according to claim ~~10~~4, wherein receiving (71) the first terminal

capability information for the group paging comprises:

receiving (101), from the terminal, a terminal capability report message for indicating the first terminal capability information~~; or~~

~~receiving a terminal assistance information message for indicating the first terminal capability information~~.

~~16. The method according to claim 14, wherein in response to a desired state indicated by the terminal assistance information message being a radio resource control (RRC) idle state, the first terminal capability information is terminal capability information of the terminal in the RRC idle state; or~~

~~in response to a desired state indicated by the terminal assistance information message being an RRC inactive state, the first terminal capability information is terminal capability information of the terminal in the RRC inactive state; or~~

~~in response to a desired state indicated by the terminal assistance information message being an RRC non-connected state, the first terminal capability information is terminal capability information of the terminal in the RRC non-connected state, wherein the RRC non-connected state comprises an RRC idle state and an RRC inactive state.~~

~~17. The method according to claim 10, further comprising:~~

~~sending the first terminal capability information to a core network device.~~

~~18~~6. The method according to claim ~~10~~4 or 5, further comprising:

determining (121) ~~that~~ the terminal re-selects or hands over from the first base station to a second base station; and

sending (122) the first terminal capability report message to the second base station.

~~19~~7. The method according to claim ~~18~~6, wherein sending (122) the first terminal capability information to the second base station comprises:

~~sending a handover request message for indicating the first terminal capability information to the second base station; or~~

sending (131), to the second base station, a paging message for indicating the first terminal capability information ~~to the second base station; or~~

~~sending a terminal context response message for indicating the first terminal capability~~

~~information to the second base station~~.

~~20~~8. The method according to any one of claims ~~10~~4 to 7, further comprising:

sending (141) second terminal capability information for the group paging;

wherein the second terminal capability information ~~is at least configured to~~ indicates ~~that~~whether or not the first base station supports ~~or does not support~~ paging the terminal ~~in~~ by the group paging ~~manner~~.

~~21~~9. A method for reporting terminal capability information, performed by a second base station, the method comprising:

receiving (151), first terminal capability information for group paging ~~from~~ sent by ~~a core network device or~~ a first base station;

wherein the first terminal capability information ~~is at least configured to~~ indicates ~~that~~whether or not a terminal supports ~~or does not support~~ paging the terminal ~~in~~ by the~~a~~ group paging ~~manner~~.

~~22. The method according to claim 21, wherein receiving the first terminal capability information for the group paging from the core network device comprises:~~

~~receiving a paging message for indicating the first terminal capability information from the core network device.~~

~~23~~10. The method according to claim ~~21~~9, wherein receiving (151) the first terminal capability information for the group paging ~~from~~ sent by the first base station comprises:

receiving (171), a handover request message for indicating the first terminal capability information from the first base station; or

receiving (171), a paging message for indicating the first terminal capability information from the first base station~~; or~~

~~receiving a terminal context response message for indicating the first terminal capability information from the first base station~~.

~~24. The method according to claim 21, further comprising:~~

~~determining grouping information for paging the terminal in the group paging manner according to the first terminal capability information.~~

~~25. The method according to claim 24, wherein the first terminal capability information comprises at least one of:~~

~~first information for indicating a capability that the terminal supports or does not support paging the terminal in the group paging manner;~~

~~second information for indicating a capability that the terminal supports or does not support grouping according to a statistical probability value of the terminal being paged; or~~

~~third information for indicating a capability that the terminal supports or does not support grouping according to a probability level of a statistical probability value of the terminal being paged.~~

~~26. The method according to claim 21, wherein receiving the first terminal capability information for the group paging from the core network device or the first base station comprises:~~

~~receiving the first terminal capability information of the terminal in different radio resource control (RRC) non-connected states, wherein the RRC non-connected states comprise an RRC idle state and/or an RRC inactive state.~~

~~27. The method according to claim 26, wherein the first terminal capability information reported in the RRC idle state is the same as the first terminal capability information reported in the RRC inactive state.~~

~~28. The method according to claim 21, wherein in response to a desired state indicated by a terminal assistance information message being a radio resource control (RRC) idle state, the first terminal capability information is terminal capability information of the terminal in the RRC idle state; or~~

~~in response to a desired state indicated by a terminal assistance information message being an RRC inactive state, the first terminal capability information is terminal capability information of the terminal in the RRC inactive state; or~~

~~in response to a desired state indicated by a terminal assistance information message being an RRC non-connected state, the first terminal capability information is terminal capability information of the terminal in the RRC non-connected state, wherein the RRC non-connected state comprises an RRC idle state and an RRC inactive state.~~

29. A method for reporting terminal capability information, performed by a core network device, the method comprising:

receiving first terminal capability information for group paging from a first base station;

wherein the first terminal capability information is at least configured to indicate that a terminal supports or does not support paging the terminal in a group paging manner.

30. The method according to claim 29, further comprising:

sending the first terminal capability information for the group paging to a second base station.

31. The method according to claim 30, wherein sending the first terminal capability information for the group paging to the second base station comprises:

sending a paging message for indicating the first terminal capability information to the second base station.

32. The method according to claim 29, further comprising:

determining grouping information for paging the terminal in the group paging manner according to the first terminal capability information.

33. The method according to claim 32, wherein the first terminal capability information comprises at least one of:

first information for indicating a capability that the terminal supports or does not support paging the terminal in the group paging manner;

second information for indicating a capability that the terminal supports or does not support grouping according to a statistical probability value of the terminal being paged; or

third information for indicating a capability that the terminal supports or does not support grouping according to a probability level of a statistical probability value of the terminal being paged.

34. The method according to claim 21, wherein receiving the first terminal capability information for the group paging from the first base station comprises:

receiving the first terminal capability information of the terminal in different radio

~~resource control (RRC) non-connected states, wherein the RRC non-connected states comprise an RRC idle state and/or an RRC inactive state.~~

~~35. The method according to claim 34, wherein the first terminal capability information of the terminal in the RRC idle state is the same as the first terminal capability information of the terminal in the RRC inactive state.~~

~~36. The method according to claim 29, wherein in response to a desired state indicated by a terminal assistance information message being a radio resource control (RRC) idle state, the first terminal capability information is terminal capability information of the terminal in the RRC idle state; or~~

~~in response to a desired state indicated by a terminal assistance information message being an RRC inactive state, the first terminal capability information is terminal capability information of the terminal in the RRC inactive state; or~~

~~in response to a desired state indicated by a terminal assistance information message being an RRC non-connected state, the first terminal capability information is terminal capability information of the terminal in the RRC non-connected state, wherein the RRC non-connected state comprises an RRC idle state and an RRC inactive state.~~

~~37~~11. A terminal, which configured to perform the method according to any one of claims 1 to 3.

~~An apparatus for reporting terminal capability information, comprising~~

~~a reporting module, configured to report first terminal capability information for group paging;~~

~~wherein the first terminal capability information is at least configured to indicate that a terminal supports or does not support paging the terminal in a group paging manner.~~

12. A base station, which configured to perform the method according to any one of claims 4 to 10.

13. A computer storage medium having stored therein computer-executable instructions that when executed by a processor of a terminal, cause the processor to perform the method of any one of claims 1 to 3.

14. A computer storage medium having stored therein computer-executable instructions that when executed by a processor of a terminal, cause the processor to perform the method of any one of claims 4 to 10.

~~38. An apparatus for reporting terminal capability information, comprising~~

~~a receiving module, configured to receive first terminal capability information for group paging;~~

~~wherein the first terminal capability information is at least configured to indicate that a terminal supports or does not support paging the terminal in a group paging manner.~~

~~39. An apparatus for reporting terminal capability information, comprising~~

~~a receiving module, configured to receive first terminal capability information for group paging from a core network device or a first base station;~~

~~wherein the first terminal capability information is at least configured to indicate that a terminal supports or does not support paging the terminal in a group paging manner.~~

~~40. An apparatus for reporting terminal capability information, comprising~~

~~a receiving module, configured to receive first terminal capability information for group paging from a first base station;~~

~~wherein the first terminal capability information is at least configured to indicate that a terminal supports or does not support paging the terminal in a group paging manner.~~

~~41. A communication device, comprising:~~

~~a memory; and~~

~~a processor, respectively connected to an antenna and the memory, and configured to, by executing computer-executable instructions stored on the memory, control transmitting and receiving of the antenna, and implement the method of any one of claims 1 to 9, claims 10 to 20, claims 21 to 28, or claims 29 to 36.~~

~~42. A computer storage medium stored with computer-executable instructions, wherein when the computer-executable instructions are executed by a processor, the method of any one of claims 1 to 9, claims 10 to 20, claims 21 to 28, or claims 29 to 36 is implemented.~~