

CLAIMS

1. A method for monitoring a physical channel, applicable for a terminal device, comprising:

performing, by the terminal device, physical downlink control channel (PDCCH) monitoring on a first serving cell according to a first serving cell group, wherein the terminal device is configured with at least one serving cell group,

wherein the first serving cell is a serving cell comprised in the first serving cell group, and the first serving cell group is a serving cell group in the at least one serving cell group.

2. The method of claim 1, wherein performing, by the terminal device, PDCCH monitoring on the first serving cell according to the first serving cell group comprises:

performing, by the terminal device, PDCCH monitoring on the first serving cell according to a search space (SS) set corresponding to a first group identifier;

in response to detecting a first DCI format on a second serving cell in the first serving cell group by the terminal device according to the SS set corresponding to the first group identifier, performing, by the terminal device, starting from a first-slot on the first serving cell, PDCCH monitoring on the first serving cell according to a SS set corresponding to a second group identifier, and stopping performing PDCCH monitoring according to the SS set corresponding to the first group identifier.

3. The method of claim 2, wherein the first-slot comprises a first slot after at least P1 symbols after a last symbol of the PDCCH carrying the first DCI format.

4. The method of any one of claims 1 to 3, wherein performing, by the terminal device, PDCCH monitoring on the first serving cell according to the first serving cell group comprises:

in response to detecting a second DCI format by the terminal device in at least one SS set on a third serving cell in the first serving cell group, setting, by the terminal device, a first timer to a first timing value.

5. The method of any one of claims 1 to 4, wherein performing, by the terminal device, PDCCH monitoring on the first serving cell according to the first serving cell group comprises:

in response to performing PDCCH monitoring on the first serving cell by the terminal device according to a SS set corresponding to a second group identifier, performing, by the terminal device, starting from a second slot on the first serving cell, PDCCH monitoring on the first serving cell according to a SS set corresponding to a first group identifier, and stopping performing PDCCH monitoring according to the SS set corresponding to the second group identifier.

6. The method of claim 5, wherein the second slot comprises a first slot after at least P2 symbols after a corresponding slot when a first timer expires; or

wherein the second slot comprises a first slot after at least P2 symbols after a last symbol of a first remaining channel occupation length, wherein the first remaining channel occupation length comprises a remaining channel occupation length with a latest end position in at least one remaining channel occupation length corresponding to service cells in the first serving cell group, or a remaining channel occupation length with an earliest end position in at least one remaining channel occupation length corresponding to the service cells in the first service cell group, or a remaining channel occupation length corresponding to the second serving cell in the first service cell group, or

wherein the second slot is a slot that arrives earliest among the above slots.

~~7. The method of claim 6, wherein the first remaining channel occupation length is determined according to a detected DCI format 2_0, or the first remaining channel occupation length is determined according to a high layer configuration parameter.~~

~~87.~~ The method of claim 2 or 3, wherein the first-slot is determined according to a first subcarrier spacing.

~~98.~~ The method of claim 3, wherein P1 symbols are determined according to a first subcarrier spacing.

~~109.~~ The method of claim ~~98~~, wherein,

in response to the first subcarrier spacing being 15kHz or a configuration of the first subcarrier spacing being $\mu = 0$, P1 is greater than or equal to 10; or

in response to the first subcarrier spacing being 30kHz or the configuration of the first subcarrier spacing being $\mu = 1$, P1 is greater than or equal to 12; or

in response to the first subcarrier spacing being 60kHz or the configuration of the first subcarrier spacing being $\mu = 2$, P1 is greater than or equal to 22; or

in response to the first subcarrier spacing being 120kHz or the configuration of the first subcarrier spacing being $\mu = 3$, P1 is greater than or equal to 25.

~~110.~~ The method of claim ~~98~~, wherein,

in response to the first subcarrier spacing being 15kHz or a configuration of the first subcarrier spacing being $\mu = 0$, P1 is greater than or equal to 5; or

in response to the first subcarrier spacing being 30kHz or the configuration of the first subcarrier spacing being $\mu = 1$, P1 is greater than or equal to 5.5; or

in response to the first subcarrier spacing being 60kHz or the configuration of the first subcarrier spacing being $\mu = 2$, P1 is greater than or equal to 11.

~~12~~11. The method of any one of claims ~~8-7~~ to ~~11~~10, wherein,

~~the first subcarrier spacing is a subcarrier spacing corresponding to the second serving cell in the first serving cell group; or~~

~~the first subcarrier spacing is a subcarrier spacing corresponding to the first serving cell; or~~

~~the first subcarrier spacing is preset; or~~

~~the first subcarrier spacing is configured by a network device; or~~

the first subcarrier spacing is a minimum subcarrier spacing among subcarrier spacings corresponding to serving cells comprised in the first serving cell group; ~~or~~

~~the first subcarrier spacing is a maximum subcarrier spacing among subcarrier spacings corresponding to the serving cells comprised in the first serving cell group.~~

~~13~~12. The method of claim 4 or 6, wherein,

the first timer takes a slot as a timing unit, and after the first timer is set to take a value, the value of the first timer is subtracted by 1 every time one slot passes.

~~14~~13. The method of claim 4, 6 or ~~13~~12, wherein,

~~the first timing value set for the first timer is configured by a high layer parameter; and/or,~~

~~the first timing value comprises N slots, and N is a positive integer; and/or,~~

~~a slot corresponding to the first timer is determined according to the second subcarrier spacing; and/or~~

~~the first timer is a timer corresponding to the first serving cell group.~~

1514. The method of claim 1413, wherein,

~~the second subcarrier spacing is a subcarrier spacing corresponding to the third serving cell in the first serving cell group; or~~

~~the second subcarrier spacing is the subcarrier spacing corresponding to the first serving cell; or~~

~~the second subcarrier spacing is preset; or~~

~~the second subcarrier spacing is configured by a network device; or~~

~~the second subcarrier spacing is a minimum subcarrier spacing among subcarrier spacings corresponding to serving cells comprised in the first serving cell group; or~~

~~the second subcarrier spacing is a maximum subcarrier spacing among subcarrier spacings corresponding to serving cells comprised in the first serving cell group.~~

1615. The method of claim 5 or 6, wherein the second slot is determined according to a third subcarrier spacing.

1716. The method of claim 6, wherein P2 symbols are determined according to a third subcarrier spacing.

1817. The method of claim 1716, wherein,

in response to the third subcarrier spacing being 15kHz or a configuration of the third subcarrier spacing being $\mu = 0$, P_2 is greater than or equal to 10; or

in response to the third subcarrier spacing being 30kHz or the configuration of the third subcarrier spacing being $\mu = 1$, P_2 is greater than or equal to 12; or

in response to the third subcarrier spacing being 60kHz or the configuration of the third subcarrier spacing being $\mu = 2$, P_2 is greater than or equal to 22; or

in response to the third subcarrier spacing being 120kHz or the configuration of the third subcarrier spacing being $\mu = 3$, P_2 is greater than or equal to 25.

~~19~~18. The method of claim ~~17~~16, wherein,

in response to the third subcarrier spacing being 15kHz or a configuration of the third subcarrier spacing $\mu = 0$, P_2 is greater than or equal to 5; or

in response to the third subcarrier spacing being 30kHz or the configuration of the third subcarrier spacing being $\mu = 1$, P_2 is greater than or equal to 5.5; or

in response to the third subcarrier spacing being 60 kHz or the configuration of the third subcarrier spacing being $\mu = 2$, P_2 is greater than or equal to 11.

~~20~~19. The method of any one of claims ~~16~~15 to ~~19~~18, wherein,

~~the third subcarrier spacing is a subcarrier spacing corresponding to the second serving cell in the first serving cell group; or~~

~~the third subcarrier spacing is a subcarrier spacing corresponding to the first serving cell; or~~

~~the third subcarrier spacing is preset; or~~

~~the third subcarrier spacing is configured by a network device; or~~

the third subcarrier spacing is a minimum subcarrier spacing among subcarrier spacings corresponding to serving cells comprised in the first serving cell group; or

~~the third subcarrier spacing is a maximum subcarrier spacing among subcarrier spacings corresponding to the serving cells comprised in the first serving cell group.~~

21. The method of claim 2 or 6, wherein,

the second serving cell comprises a serving cell, in which the first DCI format is first detected according to the SS set corresponding to the first group identifier, in the first serving cell group; or

~~the second serving cell comprises any serving cell in the first serving cell group;~~
or

~~the second serving cell comprises a preset serving cell in the first serving cell group; or~~

~~the second serving cell comprises a special cell (SpCell) in the first serving cell group; or~~

~~the second serving cell comprises a serving cell with a minimum cell index in the first serving cell group; or~~

~~the second serving cell comprises a serving cell with a maximum cell index in the first serving cell group; or~~

~~the second serving cell comprises a serving cell indicated by a network device in the first serving cell group.~~

22. The method of claim 2, wherein,

~~the first DCI format comprises a first DCI format that is first detected on the second serving cell according to the SS set corresponding to the first group identifier; and/or~~

~~the first DCI format comprises any DCI format.~~

~~23. The method of claim 4, wherein,~~

~~the third serving cell comprises any one of serving cell in the first serving cell group; and/or~~

~~the at least one SS set comprises any SS set; and/or~~

~~the second DCI format comprises any DCI format.~~

~~24. The method of claim 1, wherein performing, by the terminal device, PDCCH monitoring on the first serving cell according to the first serving cell group comprises:~~

~~in response to performing PDCCH monitoring on at least one serving cell in first serving cell group by the terminal device according to a SS set corresponding to a first group identifier, performing, by the terminal device, PDCCH monitoring on the first serving cell according to the SS set corresponding to the first group identifier; or~~

~~in response to performing PDCCH monitoring on the at least one serving cell in first serving cell group by the terminal device according to a SS set corresponding to a second group identifier, performing, by the terminal device, PDCCH monitoring on the first serving cell according to the SS set corresponding to the second group identifier.~~

~~25. The method of claim 1, wherein performing, by the terminal device, PDCCH monitoring on the first serving cell according to the first serving cell group comprises:~~

~~wherein the first serving cell comprises a SS set corresponding to a first group identifier and does not comprise a SS set corresponding to a second group identifier,~~

~~in response to performing PDCCH monitoring on at least one serving cell in the first serving cell group by the terminal device according to the SS set corresponding to the first group identifier, performing, by the terminal device, PDCCH monitoring on the first serving cell according to the SS set corresponding to the first group identifier; or~~

~~in response to performing PDCCH monitoring on the at least one serving cell in the first serving cell group by the terminal device according to the SS set corresponding to the second group identifier, performing, by the terminal device, PDCCH monitoring on the first serving cell according to the SS set corresponding to the first group identifier.~~

~~26. The method of claim 24 or 25, wherein a downlink active bandwidth part (BWP) of the terminal device on the first serving cell is switched from a first BWP to a second BWP.~~

~~27. The method of claim 26, wherein performing, by the terminal device, PDCCH monitoring on the first serving cell according to the SS set corresponding to the first group identifier comprises:~~

~~performing, by the terminal device, PDCCH monitoring on the second BWP of the first serving cell according to the SS set corresponding to the first group identifier; or~~

~~wherein performing, by the terminal device, PDCCH monitoring on the first serving cell according to the SS set corresponding to the second group identifier comprises:~~

~~performing, by the terminal device, PDCCH monitoring on the second BWP of the first serving cell according to the SS set corresponding to the second group identifier.~~

~~28. The method of any one of claims 1 to 27, wherein performing, by the terminal device, PDCCH monitoring on the first serving cell according to the first serving cell group comprises:~~

~~in response to the first serving cell comprising a first SS set, the first SS set not belonging to a SS set corresponding to a first group identifier and not belonging to a SS set corresponding to a second group identifier, performing, by the terminal device, PDCCH monitoring according to the first SS set.~~

~~29. The method of any one of claims 1 to 28, wherein the terminal device is not configured with search space switching indication signaling.~~

~~30. The method of claim 1, wherein performing, by the terminal device, PDCCH monitoring on the first serving cell according to the first serving cell group comprises:~~

~~in a case that the terminal device is configured with a search space switching indication signaling, performing, by the terminal device, PDCCH monitoring on the first serving cell according to the first serving cell group.~~

~~31. The method of claim 30, further comprising:~~

~~in a case that the terminal device is not configured with a search space switching indication signaling, not performing, by the terminal device, PDCCH monitoring on the first serving cell according to the first serving cell group.~~

~~32. The method of claim 31, further comprising:~~

~~performing, by the terminal device, PDCCH monitoring on the first serving cell according to the first serving cell.~~

33. A terminal device, comprising:

~~a physical channel monitoring module, configured to perform physical downlink control channel (PDCCH) monitoring on a first serving cell according to a first serving cell group in a case that the terminal device is configured with at least one serving cell group;~~

~~wherein the first serving cell is a serving cell comprised in the first serving cell group, and the first serving cell group is a serving cell group in the at least one serving cell group.~~

34. The terminal device of claim 33, wherein the physical channel monitoring module comprises:

~~a first monitoring submodule, configured to perform PDCCH monitoring on the first serving cell according to a search space (SS) set corresponding to a first group identifier;~~

~~a second monitoring submodule, configured to: in a case that a first DCI format is detected on a second serving cell in the first serving cell group according to the SS set corresponding to the first group identifier, perform, starting from a first slot on the first serving cell, PDCCH monitoring on the first serving cell according to a SS set corresponding to a second group identifier, and stop performing PDCCH monitoring according to the SS set corresponding to the first group identifier.~~

35. The terminal device of claim 34, wherein the first slot comprises a first slot after at least P1 symbols after a last symbol of the PDCCH carrying the first DCI format.

36. The terminal device of any one of claims 33 to 35, wherein the physical channel monitoring module comprises:

~~a timer setting submodule, configured to set a first timer to a first timing value in a case that a second DCI format is detected in at least one SS set on a third serving cell in the first serving cell group.~~

~~37. The terminal device of any one of claims 33 to 36, wherein the physical channel monitoring module comprises:~~

~~a third monitoring submodule, configured to perform PDCCH monitoring on the first serving cell according to a SS set corresponding to a second group identifier; and~~

~~a fourth monitoring submodule, configured to: in a case that the third monitoring submodule performs PDCCH monitoring on the first serving cell according to the SS set corresponding to the second group identifier, perform, starting from a second slot on the first serving cell, PDCCH monitoring on the first serving cell according to a SS set corresponding to a first group identifier, and stop performing PDCCH monitoring according to the SS set corresponding to the second group identifier.~~

~~38. The terminal device of claim 37, wherein the second slot comprises a first slot after at least P2 symbols after a corresponding slot when a first timer expires, or~~

~~wherein the second slot comprises a first slot after at least P2 symbols after a last symbol of a first remaining channel occupation length, wherein the first remaining channel occupation length comprises a remaining channel occupation length with a latest end position in at least one remaining channel occupation length corresponding to service cells in the first serving cell group, or a remaining channel occupation length with a earliest end position in at least one remaining channel occupation length corresponding to the service cells in the first service cell group, or a remaining channel occupation length corresponding to the second serving cell in the first service cell group; or~~

~~wherein the second slot is a slot that arrives at the earliest among the above slots.~~

~~39. The terminal device of claim 38, wherein the first remaining channel occupation length is determined according to a detected DCI format 2_0, or the first remaining channel occupation length is determined according to a high layer configuration parameter.~~

~~40. The terminal device of claim 34 or 35, wherein the first slot is determined according to a first subcarrier spacing.~~

~~41. The terminal device of claim 35, wherein P1 symbols are determined according to a first subcarrier spacing.~~

~~42. The terminal device of claim 41, wherein,~~

~~in response to the first subcarrier spacing being 15kHz or a configuration of the first subcarrier spacing being $\mu=0$, P1 is greater than or equal to 10; or~~

~~in response to the first subcarrier spacing being 30kHz or the configuration of the first subcarrier spacing being $\mu=1$, P1 is greater than or equal to 12; or~~

~~in response to the first subcarrier spacing being 60kHz or the configuration of the first subcarrier spacing being $\mu=2$, P1 is greater than or equal to 22; or~~

~~in response to the first subcarrier spacing being 120kHz or the configuration of the first subcarrier spacing being $\mu=3$, P1 is greater than or equal to 25.~~

~~43. The terminal device of claim 41, wherein,~~

~~in response to the first subcarrier spacing being 15kHz or a configuration of the first subcarrier spacing being $\mu=0$, P1 is greater than or equal to 5; or~~

~~in response to the first subcarrier spacing being 30kHz or the configuration of the first subcarrier spacing being $\mu=1$, P1 is greater than or equal to 5.5; or~~

~~in response to the first subcarrier spacing being 60kHz or the configuration of the first subcarrier spacing being $\mu=2$, P1 is greater than or equal to 11.~~

~~44. The terminal device of any one of claims 40 to 43, wherein,~~

~~the first subcarrier spacing is a subcarrier spacing corresponding to the second serving cell in the first serving cell group; or~~

~~the first subcarrier spacing is a subcarrier spacing corresponding to the first serving cell; or~~

~~the first subcarrier spacing is preset; or~~

~~the first subcarrier spacing is configured by a network device; or~~

~~the first subcarrier spacing is a minimum subcarrier spacing among subcarrier spacings corresponding to serving cells comprised in the first serving cell group; or~~

~~the first subcarrier spacing is a maximum subcarrier spacing among subcarrier spacings corresponding to the serving cells comprised in the first serving cell group.~~

~~45. The terminal device of claim 36 or 38, wherein,~~

~~the first timer takes a slot as a timing unit, and after the first timer is set to take a value, the value of the first timer is subtracted by 1 every time one slot passes.~~

~~46. The terminal device of claim 36, 38 or 45, wherein,~~

~~the first timing value set for the first timer is configured by a high layer parameter; and/or,~~

~~the first timing value comprises N slots, and N is a positive integer; and/or,~~

~~a slot corresponding to the first timer is determined according to the second subcarrier spacing; and/or~~

~~the first timer is a timer corresponding to the first serving cell group.~~

47. The terminal device of claim 46, wherein,

~~the second subcarrier spacing is a subcarrier spacing corresponding to the third serving cell in the first serving cell group; or~~

~~the second subcarrier spacing is the subcarrier spacing corresponding to the first serving cell; or~~

~~the second subcarrier spacing is preset; or~~

~~the second subcarrier spacing is configured by a network device; or~~

~~the second subcarrier spacing is a minimum subcarrier spacing among subcarrier spacings corresponding to serving cells comprised in the first serving cell group; or~~

~~the second subcarrier spacing is a maximum subcarrier spacing among subcarrier spacings corresponding to serving cells comprised in the first serving cell group.~~

48. The terminal device of claim 37 or 38, wherein the second slot is determined according to a third subcarrier spacing.

49. The terminal device of claim 38, wherein P2 symbols are determined according to a third subcarrier spacing.

50. The terminal device of claim 49, wherein,

~~in response to the third subcarrier spacing being 15kHz or a configuration of the third subcarrier spacing being $\mu=0$, P2 is greater than or equal to 10; or~~

~~in response to the third subcarrier spacing being 30kHz or the configuration of the third subcarrier spacing being $\mu=1$, P2 is greater than or equal to 12; or~~

~~in response to the third subcarrier spacing being 60kHz or the configuration of the third subcarrier spacing being $\mu=2$, P2 is greater than or equal to 22; or~~

~~in response to the third subcarrier spacing being 120kHz or the configuration of the third subcarrier spacing being $\mu=3$, P2 is greater than or equal to 25.~~

51. The terminal device of claim 49, wherein,

~~in response to the third subcarrier spacing being 15kHz or a configuration of the third subcarrier spacing being $\mu=0$, P2 is greater than or equal to 5; or~~

~~in response to the third subcarrier spacing being 30kHz or the configuration of the third subcarrier spacing being $\mu=1$, P2 is greater than or equal to 5.5; or~~

~~in response to the third subcarrier spacing being 60 kHz or the configuration of the third subcarrier spacing being $\mu=2$, P2 is greater than or equal to 11.~~

52. The terminal device of any one of claims 48 to 51, wherein,

~~the third subcarrier spacing is a subcarrier spacing corresponding to the second serving cell in the first serving cell group; or~~

~~the third subcarrier spacing is a subcarrier spacing corresponding to the first serving cell; or~~

~~the third subcarrier spacing is preset; or~~

~~the third subcarrier spacing is configured by a network device; or~~

~~the third subcarrier spacing is a minimum subcarrier spacing among subcarrier spacings corresponding to serving cells comprised in the first serving cell group; or~~

~~the third subcarrier spacing is a maximum subcarrier spacing among subcarrier spacings corresponding to the serving cells comprised in the first serving cell group.~~

53. The terminal device of claim 34 or 38, wherein,

~~the second serving cell comprises a first serving cell, in which the first DCI format is detected according to the SS set corresponding to the first group identifier, in the first serving cell group; or~~

~~the second serving cell comprises any serving cell in the first serving cell group;~~
~~or~~

~~the second serving cell comprises a preset serving cell in the first serving cell group; or~~

~~the second serving cell comprises a special cell (SpCell) in the first serving cell group; or~~

~~the second serving cell comprises a serving cell with a minimum cell index in the first serving cell group; or~~

~~the second serving cell comprises a serving cell with a maximum cell index in the first serving cell group; or~~

~~the second serving cell comprises a serving cell indicated by a network device in the first serving cell group.~~

54. The terminal device of claim 34, wherein,

~~the first DCI format comprises a first DCI format that is first detected on the second serving cell according to the SS set corresponding to the first group identifier; and/or~~

~~the first DCI format comprises any DCI format.~~

55. The terminal device of claim 36, wherein,

~~the third serving cell comprises any one of serving cell in the first serving cell group; and/or~~

~~the at least one SS set comprises any SS set; and/or~~

~~the second DCI format comprises any DCI format.~~

56. The terminal device of claim 33, wherein the physical channel monitoring module comprises:

~~a fifth monitoring submodule, configured to perform PDCCH monitoring on at least one serving cell in first serving cell group according to a SS set corresponding to a first group identifier;~~

~~a sixth monitoring submodule, configured to perform PDCCH monitoring on the first serving cell according to the SS set corresponding to the first group identifier in a case that the fifth monitoring submodule performs PDCCH monitoring on at least one serving cell in first serving cell group according to a SS set corresponding to a first group identifier;~~

~~a seventh monitoring submodule, configured to perform PDCCH monitoring on the at least one serving cell in first serving cell group according to a SS set corresponding to a second group identifier; and~~

~~an eighth monitoring submodule, configured to perform PDCCH monitoring on the first serving cell according to the SS set corresponding to the second group identifier~~

~~in a case that the seventh monitoring submodule performs PDCCH monitoring on the at least one serving cell in first serving cell group according to a SS set corresponding to a second group identifier.~~

~~57. The terminal device of claim 33, wherein the first serving cell comprises a SS set corresponding to a first group identifier and does not comprise a SS set corresponding to a second group identifier,~~

~~wherein the physical channel monitoring module comprises:~~

~~a ninth monitoring submodule, configured to perform PDCCH monitoring on at least one serving cell in the first serving cell group according to the SS set corresponding to the first group identifier;~~

~~a tenth monitoring submodule, configured to perform PDCCH monitoring on the first serving cell according to the SS set corresponding to the first group identifier in a case that the ninth monitoring submodule performs PDCCH monitoring on at least one serving cell in the first serving cell group according to the SS set corresponding to the first group identifier;~~

~~an eleventh monitoring submodule, configured to perform PDCCH monitoring on the at least one serving cell in the first serving cell group according to the SS set corresponding to the second group identifier; and~~

~~a twelfth monitoring submodule, configured to perform PDCCH monitoring on the first serving cell according to the SS set corresponding to the first group identifier in a case that the eleventh monitoring submodule performs PDCCH monitoring on the at least one serving cell in the first serving cell group according to the SS set corresponding to the second group identifier.~~

~~58. The terminal device of claim 56 or 57, further comprising:~~

~~a switching processing module, configured to switch a downlink active bandwidth part (BWP) on the first serving cell from a first BWP to a second BWP.~~

~~59. The terminal device of claim 58, further comprising:~~

~~a thirteenth monitoring submodule, configured to perform PDCCH monitoring on the second BWP of the first serving cell according to the SS set corresponding to the first group identifier; or~~

~~a fourteenth monitoring submodule, configured to perform PDCCH monitoring on the second BWP of the first serving cell according to the SS set corresponding to the second group identifier.~~

~~60. The terminal device of any one of claims 33 to 59, further comprising:~~

~~a fifteenth monitoring submodule, configured to perform PDCCH monitoring according to the first SS set in a case that the first serving cell comprises a first SS set, and the first SS set does not belong to a SS set corresponding to a first group identifier and does not belong to a SS set corresponding to a second group identifier.~~

~~61. The terminal device of any one of claims 33 to 60, wherein the terminal device is not configured with search space switching indication signaling.~~

~~62. The terminal device of claim 33, further comprising:~~

~~a sixteenth monitoring submodule, configured to perform PDCCH monitoring on the first serving cell according to the first serving cell group in a case that the terminal device is configured with a search space switching indication signaling.~~

~~63. The terminal device of claim 62, wherein,~~

~~the sixteenth monitoring submodule is configured to not perform PDCCH monitoring on the first serving cell according to the first serving cell group in a case that the terminal device is not configured with a search space switching indication signaling.~~

~~64. The terminal device of claim 63, further comprising:~~

~~the seventeenth monitoring submodule, configured to perform PDCCH monitoring on the first serving cell according to the first serving cell.~~

~~65~~20. A terminal device, comprising: a processor and a memory, wherein the memory is configured to store a computer program, the processor invokes and executes the computer program stored in the memory, and performs the steps of the method for monitoring physical channel of any one of claims 1 to ~~32~~19.

~~66. A chip comprising:~~

~~a processor, configured to invoke and execute a computer program from the memory, and cause a device equipped with the chip to perform the steps of the method for monitoring a physical channel of any one of claims 1 to 32.~~

~~67. A computer readable storage medium for storing a computer program, wherein,~~

~~the computer program causes a computer to perform the steps of the method for monitoring a physical channel of any one of claims 1 to 32.~~

~~68. A computer program product comprising computer program instructions, wherein,~~

~~the computer program causes a computer to perform the steps of the method for monitoring a physical channel of any one of claims 1 to 32.~~

~~69. A computer program that causes a computer to perform the steps of the method for monitoring a physical channel of any one of claims 1 to 32.~~