

WHAT IS CLAIMED IS:

1. A method for BWP switching indication on an unlicensed spectrum, comprising:

sending by a base station, BWP switching indication information through a second antenna panel, wherein the BWP switching indication information is configured to indicate a first target BWP to be switched to when a terminal communicates with a first antenna panel of the base station;

wherein, the first and second antenna panels are two different antenna panels, and the first target BWP comprises N bandwidth units BWUs of M BWUs detected by the first antenna panel to be idle, where N is less than or equal to M, and both M and N are positive integers.

2. The method of claim 1, wherein the BWP switching indication information comprises: antenna panel indication information and an identifier of the first target BWP;

wherein, the antenna panel indication information comprises any one of the following: an identifier of the first antenna panel, a reference signal group identifier corresponding to the first antenna panel, and a reference signal identifier corresponding to the first antenna panel.

3. The method of claim 1, wherein the second antenna panel is an antenna panel within a channel occupation time.

4. The method of claim 3, wherein when there are multiple antenna panels within the channel occupation time, the second antenna panel is an antenna panel with the longest remaining channel occupation time and/or the greatest number of BWUs detected to be idle.

5. The method of claim 1, wherein the second antenna panel is an antenna panel that detects idle channel(s).

6. The method of claim 5, wherein when there are multiple antenna panels that detect idle channel(s), the second antenna panel is an antenna panel with the longest remaining channel occupancy time and/or the greatest number of BWUs detected to be idle.

7. The method of claim 1, wherein the BWP switching indication information is further configured to indicate a second target BWP to which the second antenna panel is to be switched.

8. The method of any one of claims 1 to 7, wherein sending by the base station, BWP switching indication information through the second antenna panel comprises:

sending by the base station, a physical downlink control channel PDCCH signaling

through the second antenna panel, wherein the PDCCH signaling comprises the BWP switching indication information.

9. A method for BWP switching indication on an unlicensed spectrum, comprising:

receiving by a terminal, BWP switching indication information sent by a second antenna panel of a base station, wherein the BWP switching indication information is configured to indicate a first target BWP to be switched to when the terminal communicates with a first antenna panel of the base station; wherein, the first and second antenna panels are two different antenna panels, and the first target BWP comprises N bandwidth units BWUs of M BWUs detected by the first antenna panel to be idle, where N is less than or equal to M, and both M and N are positive integers;

the terminal switching to the first target BWP for communicating with the first antenna panel according to the BWP switching indication information.

10. An apparatus for BWP switching indication on an unlicensed spectrum, ~~performed by~~ applied to a base station, and comprising:

~~a processor; and~~

~~a memory, configured to store instruction executable by the processor,~~

~~wherein the processor is configured to:~~

~~send BWP switching indication information through a second antenna panel, wherein the BWP switching indication information is configured to indicate a first target BWP to be switched to when a terminal communicates with a first antenna panel of the base station;~~

an information sending module, configured to send BWP switching indication information through a second antenna panel, wherein the BWP switching indication information is configured to indicate a first target BWP to be switched to when a terminal communicates with a first antenna panel of the base station;

wherein, the first and second antenna panels are two different antenna panels, and the first target BWP comprises N bandwidth units BWUs of M BWUs detected by the first antenna panel to be idle, where N is less than or equal to M, and both M and N are positive integers.

~~11. The apparatus of claim 10, wherein the BWP switching indication information comprises: antenna panel indication information and an identifier of the first target BWP;~~

~~wherein, the antenna panel indication information comprises any one of the following: an~~

identifier of the first antenna panel, a reference signal group identifier corresponding to the first antenna panel, and a reference signal identifier corresponding to the first antenna panel.

~~12. The apparatus of claim 10, wherein the second antenna panel is an antenna panel within a channel occupation time.~~

~~13. The apparatus of claim 12, wherein when there are multiple antenna panels within the channel occupation time, the second antenna panel is an antenna panel with the longest remaining channel occupation time and/or the greatest number of BWUs detected to be idle.~~

~~14. The apparatus of claim 10, wherein the second antenna panel is an antenna panel that detects idle channel(s).~~

~~15. The apparatus of claim 14, wherein when there are multiple antenna panels that detect idle channel(s), the second antenna panel is an antenna panel with the longest remaining channel occupancy time and/or the greatest number of BWUs detected to be idle.~~

~~16. The apparatus of claim 10, wherein the BWP switching indication information is further configured to indicate a second target BWP to which the second antenna panel is to be switched.~~

~~1711. The apparatus of claim 10, wherein~~
~~the information sending module processor is configured to:~~
~~send a physical downlink control channel (PDCCH) signaling through the second antenna panel, wherein the PDCCH signaling comprises the BWP switching indication information.~~

12. An apparatus for BWP switching indication on an unlicensed spectrum, comprising:
an information receiving module, configured to receive BWP switching indication information sent by a second antenna panel of a base station, wherein the BWP switching indication information is configured to indicate a first target BWP to be switched to when the terminal communicates with a first antenna panel of the base station; wherein, the first and second antenna panels are two different antenna panels, and the first target BWP comprises N bandwidth units BWUs of M BWUs detected by the first antenna panel to be idle, where N is less than or equal to M, and both M and N are positive integers;

a BWP switching module, configured to switch to the first target BWP for communicating with the first antenna panel according to the BWP switching indication information.

13. An apparatus for BWP switching indication on an unlicensed spectrum, applied to a

base station, comprising:

~~18. An apparatus for BWP switching indication on an unlicensed spectrum, performed by a terminal, comprising:~~

~~a processor; and~~

~~a memory, configured to store instructions executable by the processor,~~

~~wherein the processor is configured to:~~

~~receive send BWP switching indication information sent by through a second antenna panel of a base station, wherein the BWP switching indication information is configured to indicate a first target BWP to be switched to when a terminal communicates with a first antenna panel of the base station;~~

~~wherein, the first and second antenna panels are two different antenna panels, and the first target BWP comprises N bandwidth units BWUs of M BWUs detected by the first antenna panel to be idle, where N is less than or equal to M, and both M and N are positive integers;~~

~~switch to the first target BWP for communicating with the first antenna panel according to the BWP switching indication information.~~

14. An apparatus for BWP switching indication on an unlicensed spectrum, performed by applied to a terminal, comprising:

a processor; and

a memory, configured to store instructions executable by the processor,

wherein the processor is configured to:

receive BWP switching indication information sent by a second antenna panel of a base station, wherein the BWP switching indication information is configured to indicate a first target BWP to be switched to when the terminal communicates with a first antenna panel of the base station; wherein, the first and second antenna panels are two different antenna panels, and the first target BWP comprises N bandwidth units BWUs of M BWUs detected by the first antenna panel to be idle, where N is less than or equal to M, and both M and N are positive integers;

switch to the first target BWP for communicating with the first antenna panel according to the BWP switching indication information.

15. A non-transitory computer readable storage medium, stored thereon with a computer

program, wherein when the computer program is executed by a processor, the method according to any of claims 1-8 is implemented, or the method according to claim 9 is implemented.