

CLAIMS

1. A terminal device comprising:

reception circuitry configured to receive a physical downlink control channel

5 including a downlink control information (DCI) format;

transmission circuitry configured to transmit a physical uplink shared channel (PUSCH) for a licensed assisted access cell scheduled by the DCI format; and

clear channel assessment (CCA) check circuitry configured to perform a listen before talk (LBT) procedure, the LBT procedure being a procedure that senses a
10 channel to determine whether the channel is idle or busy before transmission of the PUSCH, wherein

the DCI format includes first information and second information,

the first information being 1-bit information indicating either one type of a first type of the LBT procedure and a second type of the LBT procedure,

15 the second information associated with a window,

in case of the 1-bit information indicating the first type of the LBT procedure,

the CCA check circuitry is configured to determine a value of the window based on the second information,

generate a random value as a number of repetitions of CCA check with an upper
20 bound based on the value of the window, and

perform the repetitions of CCA check; and

in case of the 1-bit information indicating the second type of the LBT procedure, the CCA check circuitry is configured to perform a single CCA check.

25 2. A method for a terminal device, the method comprising:

receiving a physical downlink control channel including a downlink control information (DCI) format;

transmitting a physical uplink shared channel (PUSCH) for a licensed assisted access cell scheduled by the DCI format; and

5 performing a listen before talk (LBT) procedure, the LBT procedure being a procedure that senses a channel to determine whether the channel is idle or busy before transmission of the PUSCH, wherein

the DCI format includes first information and second information,

10 the first information being 1-bit information indicating either one type of a first type of the LBT procedure and a second type of the LBT procedure,

the second information associated with a window,

in case of the 1-bit information indicating the first type of the LBT procedure,

determining a value of the window based on the second information,

15 generating a random value as a number of repetitions of CCA check with an upper bound based on the value of the window, and

performing the repetitions of CCA check; and

in case of the 1-bit information indicating the second type of the LBT procedure,

performing a single CCA check.