

What is claimed is:

1. A method for processing a scheduling request, applied to a terminal, the method comprising:

indicating, by a media access control (MAC) layer, a physical layer to send a first
5 scheduling request.

2. The method according to claim 1, further comprising:

determining, by the physical layer according to a first rule, at least one of:

a scheduling request needing to be transmitted;

a priority of uplink control information; and

10 a priority of an uplink control channel.

3. The method according to claim 2, wherein the first rule comprises at least one of:

first information;

preferentially processing a first scheduling request finally indicated by the MAC layer;

preferentially processing a first scheduling request firstly indicated by the MAC layer; and

15 second information from a network.

4. The method according to any one of claims 1 to 3, further comprising:

the MAC layer indicating the first information to the physical layer.

5. The method according to claim 3 or 4, wherein the first information comprises at least
one of following information corresponding to the first scheduling request:

20 pre-emption indication information;

service type information;

service priority information;

logical channel information;

logical channel priority information;

25 logical channel group information;

logical channel group priority information; and

first service indication information.

6. The method according to claim 3 or 4, wherein the first information comprises at least one of following information corresponding to the first scheduling request:

pre-emption indication information;

5 service type information;

service priority information;

logical channel information;

logical channel priority information;

logical channel group information;

10 logical channel group priority information;

first service indication information;

priority information; and

priority level information.

7. The method according to any one of claims 1 to 6, wherein the MAC layer indicating
15 the physical layer to send the first scheduling request comprises:

in a case that a first condition is met, the MAC layer indicating the physical layer to send the first scheduling request.

8. The method according to claim 7, further comprising:

the MAC layer determining the first condition according to at least one of:

20 a priority of a logical channel triggering the scheduling request, an identifier of a logical channel triggering the scheduling request, a priority of a service triggering the scheduling request, an identifier of a service triggering the scheduling request, an identifier of a service corresponding to uplink control information (UCI), a priority corresponding to the UCI, a priority corresponding to a configured physical uplink shared channel (PUSCH) grant, a
25 priority of a logical channel to be transmitted, an identifier of a logical channel to be transmitted, an identifier/a priority of a service to be transmitted, an identifier/a priority of a service/data/a media access control control element (MAC CE)/a logical channel carried by the

PUSCH, second information from the network, and a priority/an identifier of a logical channel/a service/data to be transmitted triggering a Physical Random Access Channel (PRACH).

9. The method according to claim 7, further comprising:

5 determining a first resource to be transmitted according to at least one of:

a priority of a logical channel triggering the scheduling request, an identifier of a logical channel triggering the scheduling request, a priority of a service triggering the scheduling request, an identifier of a service triggering the scheduling request, an identifier of a service corresponding to hybrid automatic repeat request (HARQ) feedback, an identifier of a logical
 10 channel corresponding to the HARQ feedback, an identifier corresponding to the HARQ feedback, a priority of a service corresponding to the HARQ feedback, a priority of a logical channel corresponding to the HARQ feedback, a priority corresponding to the HARQ feedback, an identifier of a service corresponding to a (channel state information reference signal) CSI-RS, an identifier of a logical channel corresponding to the CSI-RS, an identifier corresponding to
 15 the CSI-RS, a priority of a service corresponding to the CSI-RS, a priority of a logical channel corresponding to the CSI-RS, a priority corresponding to the CSI-RS, second information from the network, an identifier of a service corresponding to UCI, a priority corresponding to the UCI, the first information, and a priority/an identifier of a logical channel/a service/data to be transmitted triggering a Physical Random Access Channel (PRACH); wherein the first resource
 20 is at least one of the scheduling request (SR), a configured physical uplink shared channel (PUSCH), the CSI-RS, the HARQ feedback, and the PRACH.

10. The method according to claim 7, further comprising:

determining the first resource to be transmitted according to at least one of:

a time point when the scheduling request is triggered, whether a MAC Protocol Data Unit
 25 (PDU) is packed, whether a MAC PDU is sent to the physical layer, a grant attribute, a service triggering the scheduling request, a logical channel triggering the scheduling request, a priority of a logical channel triggering the scheduling request, an identifier of the logical channel triggering the scheduling request, a priority of a service triggering the scheduling request, an

identifier of the service triggering the scheduling request, an identifier of a service
 corresponding to HARQ feedback, an identifier of a logical channel corresponding to the
 HARQ feedback, an identifier corresponding to the HARQ feedback, a priority of a service
 corresponding to the HARQ feedback, a priority of a logical channel corresponding to the
 5 HARQ feedback, a priority corresponding to the HARQ feedback, an identifier of a service
 corresponding to a CSI-RS, an identifier of a logical channel corresponding to the CSI-RS, an
 identifier corresponding to the CSI-RS, a priority of a service corresponding to the CSI-RS, a
 priority of a logical channel corresponding to the CSI-RS, a priority corresponding to the
 CSI-RS, the second information from the network, an identifier of a service corresponding to
 10 UCI, a priority corresponding to UCI, the first information, and a priority/an identifier of a
 logical channel/a service/data to be transmitted triggering a Physical Random Access Channel
 (PRACH); wherein the first resource is at least one of the scheduling request (SR), a configured
 physical uplink shared channel (PUSCH), the CSI-RS, the HARQ feedback and the PRACH.

11. The method according to any one of claims 7 to 10, wherein the first condition
 15 comprises at least one of:

that an uplink control channel resource transmitting the first scheduling request overlaps
 with an uplink control channel resource transmitting a second scheduling request, and a priority
 of a logical channel and/or logical channel group for the first scheduling request is higher than a
 priority of a logical channel and/or logical channel group for the second scheduling request, the
 20 first scheduling request and the second scheduling request being pending scheduling requests;

that the uplink control channel resource transmitting the first scheduling request overlaps
 with the uplink control channel resource transmitting the second scheduling request, and a
 priority of a service corresponding to the first scheduling request is higher than a priority of a
 service corresponding to the second scheduling request, the first scheduling request and the
 25 second scheduling request being pending scheduling requests;

that the uplink control channel resource transmitting the first scheduling request overlaps
 with the uplink control channel resource transmitting the second scheduling request, and a
 service type corresponding to the first scheduling request is a high reliability and low latency
 service, the first scheduling request and the second scheduling request being pending

scheduling requests;

that the uplink control channel resource transmitting the first scheduling request overlaps with the uplink control channel resource transmitting the second scheduling request, and a priority of a logical channel and/or logical channel group for the first scheduling request is not lower than a priority of a logical channel and/or logical channel group for the second scheduling request, the first scheduling request and the second scheduling request being pending scheduling requests;

that the uplink control channel resource transmitting the first scheduling request overlaps with the uplink control channel resource transmitting the second scheduling request, and a priority of a service corresponding to the first scheduling request is not lower than a priority of a service corresponding to the second scheduling request, the first scheduling request and the second scheduling request being pending scheduling requests;

that the uplink control channel resource transmitting the first scheduling request overlaps with an uplink control channel resource transmitting a third scheduling request, and a priority of a logical channel and/or logical channel group for the first scheduling request is higher than a priority of a logical channel and/or logical channel group for the third scheduling request, the first scheduling request being a pending scheduling request, and the third scheduling request being a scheduling request which the physical layer has been indicated to transmit;

that the uplink control channel resource transmitting the first scheduling request overlaps with the uplink control channel resource transmitting the third scheduling request, and a priority of a service for the first scheduling request is higher than a priority of a service for the third scheduling request, the first scheduling request being a pending scheduling request, and the third scheduling request being a scheduling request which the physical layer has been indicated to transmit;

that the uplink control channel resource transmitting the first scheduling request overlaps with the uplink control channel resource transmitting the third scheduling request, and a service type corresponding to the first scheduling request is a high reliability and low latency service, the first scheduling request being a pending scheduling request, and the third scheduling request being a scheduling request which the physical layer has been indicated to transmit;

that the uplink control channel resource transmitting the first scheduling request overlaps with the uplink control channel resource transmitting the third scheduling request, and a priority of a logical channel and/or logical channel group for the first scheduling request is not lower than a priority of a logical channel and/or logical channel group for the third scheduling request, the first scheduling request being a pending scheduling request, and the third scheduling request being a scheduling request which the physical layer has been indicated to transmit;

that the uplink control channel resource transmitting the first scheduling request overlaps with the uplink control channel resource transmitting the third scheduling request, and a priority of a service corresponding to the first scheduling request is not lower than a priority of a service corresponding to the third scheduling request, the first scheduling request being a pending scheduling request, and the third scheduling request being a scheduling request which the physical layer has been indicated to transmit;

that the first scheduling request is a first pending scheduling request after a previous pending scheduling request is cancelled;

that the first scheduling request is a first pending scheduling request triggered after a latest MAC protocol data unit (PDU) is packed

that the first scheduling request is a scheduling request which the physical layer is not indicated to transmit after a previous pending scheduling request is cancelled;

that the first scheduling request is a first pending scheduling request after a previous pending scheduling request is cancelled, and a service and/or a logical channel and/or a logical channel group triggering the scheduling request correspond to a first service;

that the first scheduling request is a first pending scheduling request triggered after a latest MAC PDU is packed, and a service and/or a logical channel and/or a logical channel group triggering the scheduling request correspond to the first service; and

that the first scheduling request is a scheduling request which the physical layer is not indicated to transmit after a previous pending scheduling request is cancelled, and a service and/or a logical channel and/or a logical channel group triggering the scheduling request correspond to the first service.

12. A device for processing a scheduling request, comprising:

an indicating unit, configured to indicate, through a media access control (MAC) layer, a physical layer to send a first scheduling request.

13. The device according to claim 12, further comprising:

5 a determining unit, configured to determine, through the physical layer according to a first rule, at least one of:

a scheduling request needing to be transmitted;

a priority of uplink control information; and

a priority of an uplink control channel.

10 14. The device according to claim 12 or 13, wherein the indicating unit is configured to indicate, by the MAC layer, the physical layer to send the first scheduling request in a case that a first condition is met.

15. The device according to claim 14, further comprising:

a determining unit, configured to determine the first condition according to at least one of:

15 a priority of a logical channel triggering the scheduling request, an identifier of a logical channel triggering the scheduling request, a priority of a service triggering the scheduling request, an identifier of a service triggering the scheduling request, an identifier of a service corresponding to uplink control information (UCI), a priority corresponding to the UCI, a priority corresponding to a configured physical uplink shared channel (PUSCH) grant, a
 20 priority of a logical channel to be transmitted, an identifier of a logical channel to be transmitted, an identifier/a priority of a service to be transmitted, an identifier/a priority of a service/data / a media access control control element (MAC CE)/a logical channel carried by the PUSCH, second information from the network, and a priority/an identifier of a logical channel/a service/data to be transmitted triggering a Physical Random Access Channel
 25 (PRACH).