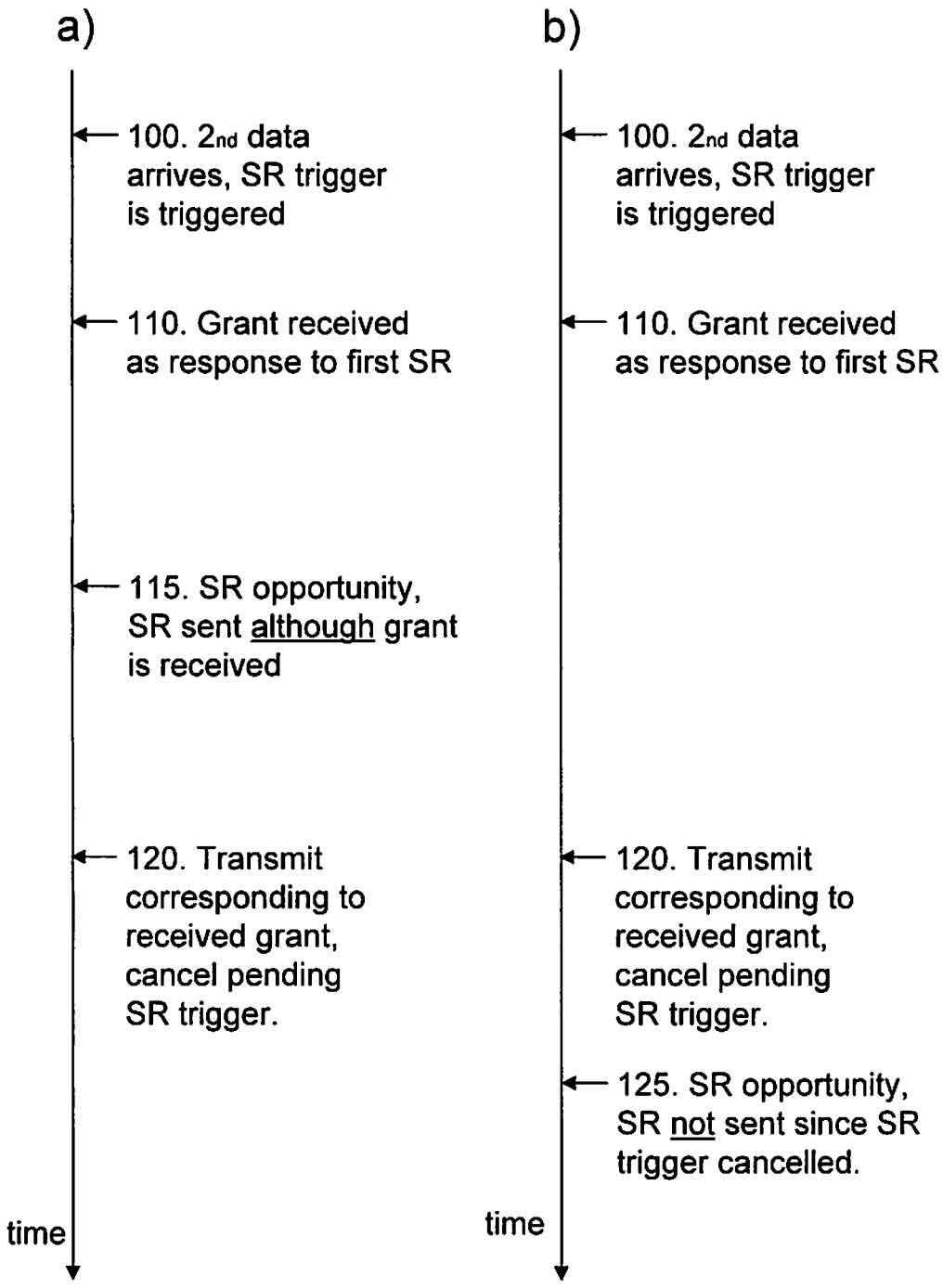

a)
100. 2nd data arrives, SR trigger is triggered
110. Grant received as response to first SR
115. SR opportunity, SR sent although grant is received
120. Transmit corresponding to received grant, cancel pending SR trigger.
time
b)
100. 2nd data arrives, SR trigger is triggered
110. Grant received as response to first SR
120. Transmit corresponding to received grant, cancel pending SR trigger.
125. SR opportunity, SR not sent since SR trigger cancelled.
time

Fig. 1

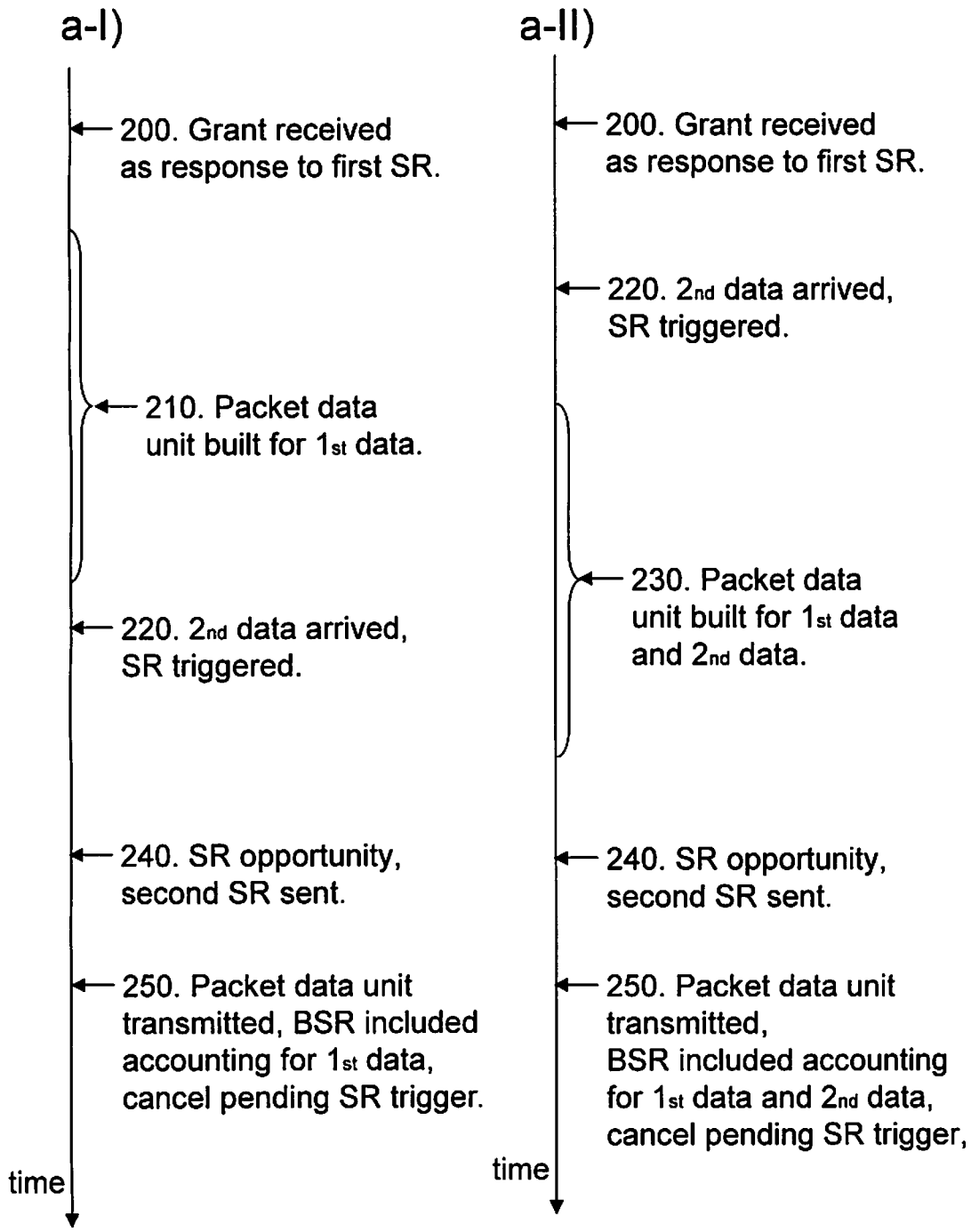

a-I)
200. Grant received as response to first SR.
210. Packet data unit built for 1st data.
220. 2nd data arrived, SR triggered.
240. SR opportunity, second SR sent.
250. Packet data unit transmitted, BSR included accounting for 1st data, cancel pending SR trigger.
time
a-II)
200. Grant received as response to first SR.
220. 2nd data arrived, SR triggered.
230. Packet data unit built for 1st data and 2nd data.
240. SR opportunity, second SR sent.
250. Packet data unit transmitted, BSR included accounting for 1st data and 2nd data, cancel pending SR trigger,
time

Fig. 2

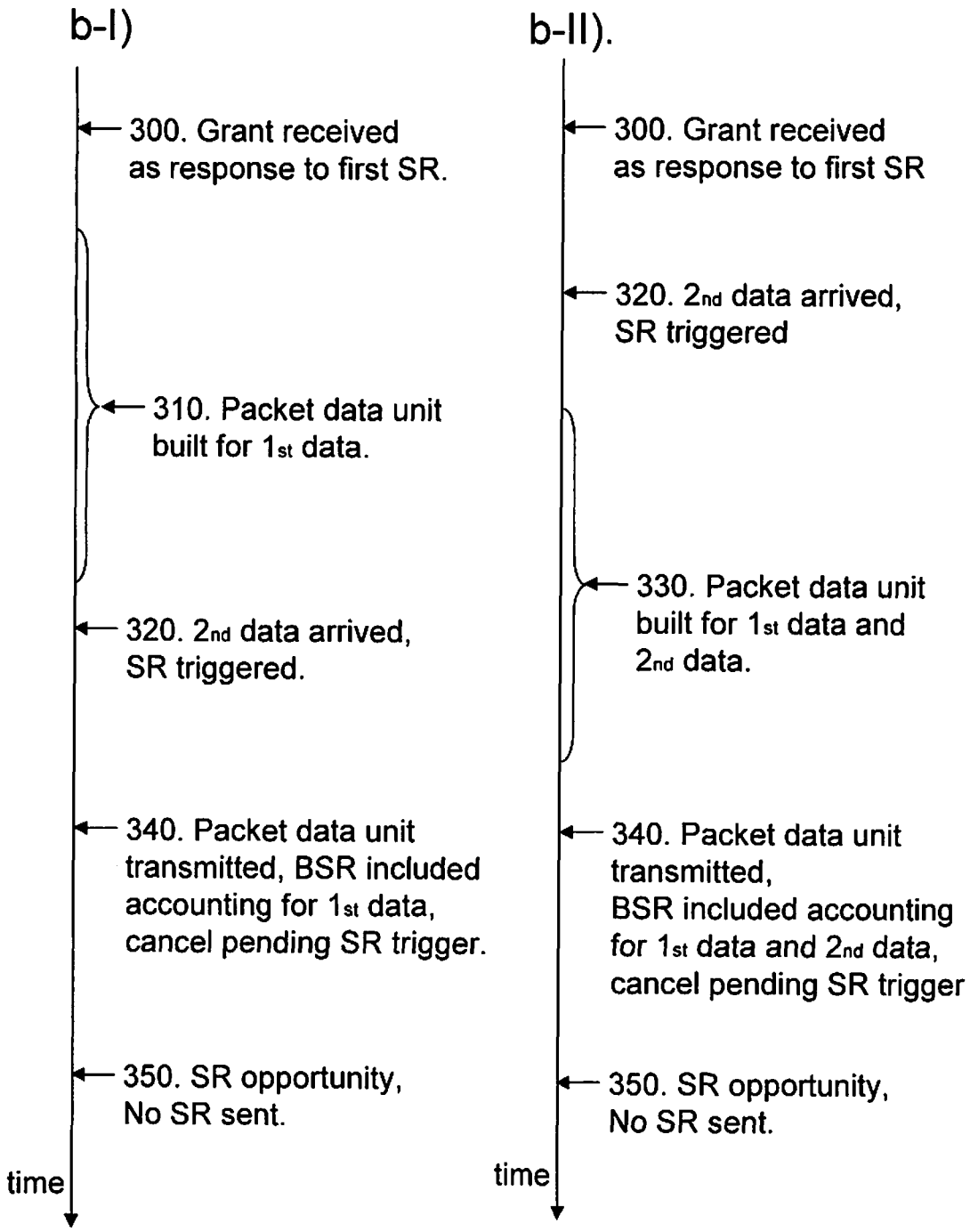

b-I)
300. Grant received as response to first SR.
310. Packet data unit built for 1st data.
320. 2nd data arrived, SR triggered.
340. Packet data unit transmitted, BSR included accounting for 1st data, cancel pending SR trigger.
350. SR opportunity, No SR sent.
time
b-II).
300. Grant received as response to first SR
320. 2nd data arrived, SR triggered
330. Packet data unit built for 1st data and 2nd data.
340. Packet data unit transmitted, BSR included accounting for 1st data and 2nd data, cancel pending SR trigger
350. SR opportunity, No SR sent.
time

Fig. 3

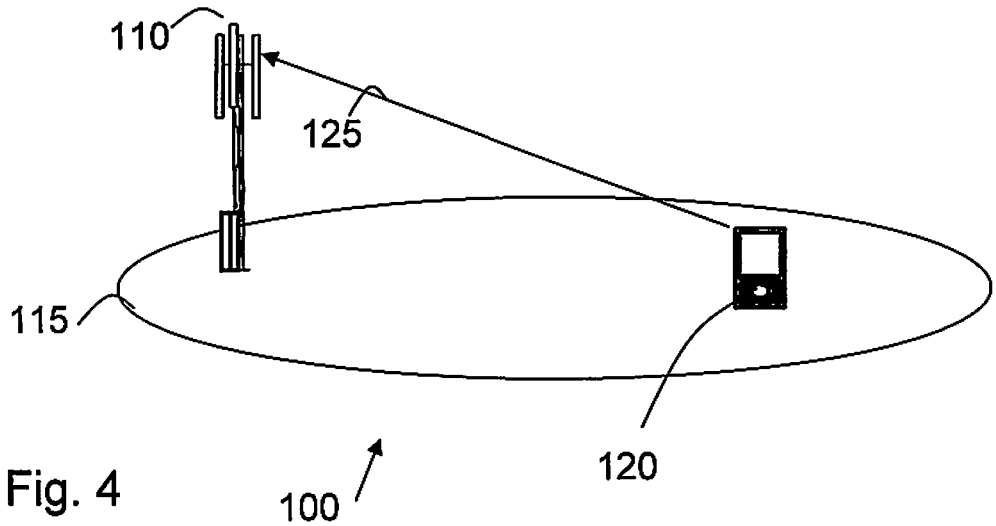


Fig. 4

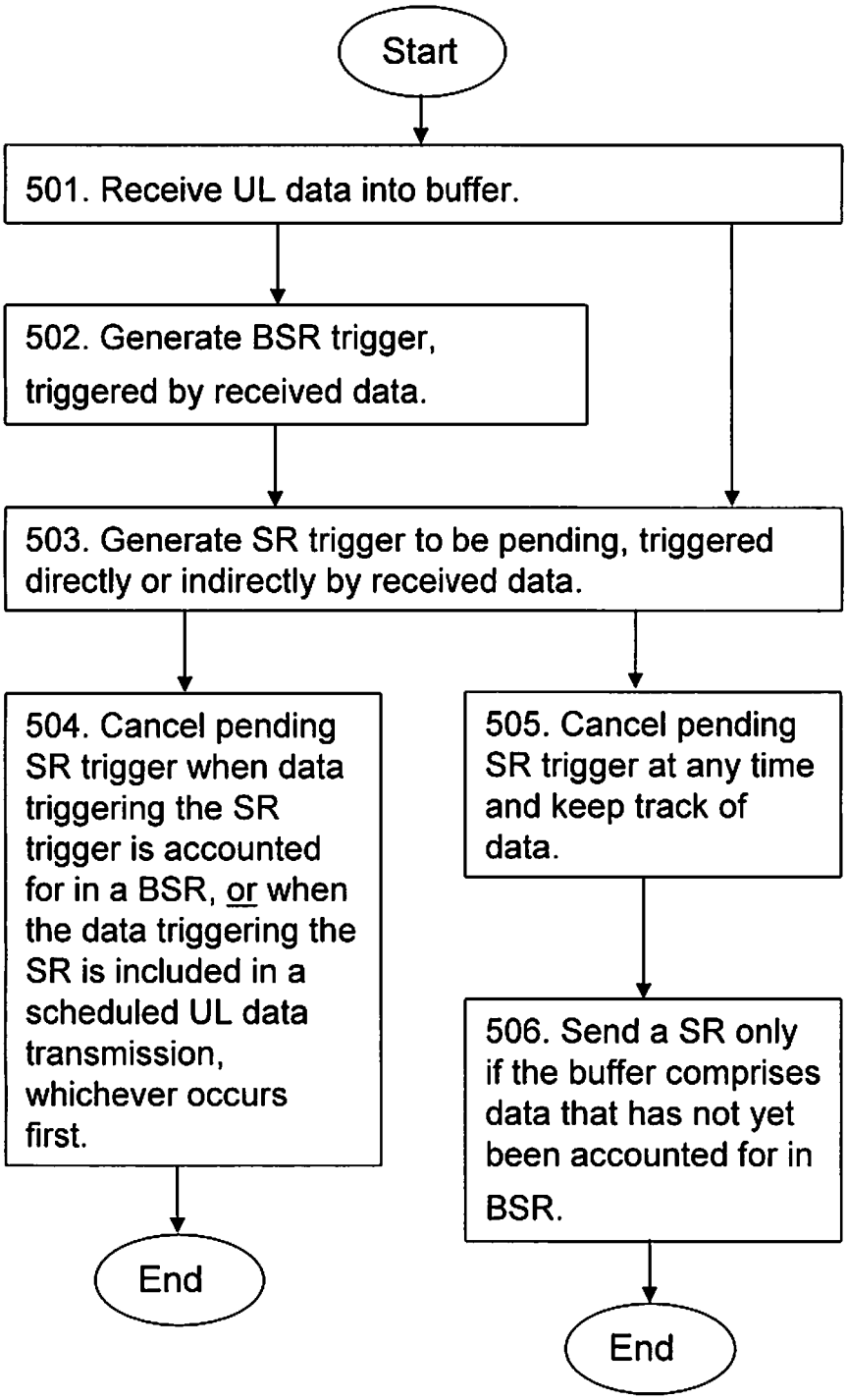

Start
501. Receive UL data into buffer.
502. Generate BSR trigger, triggered by received data.
503. Generate SR trigger to be pending, triggered directly or indirectly by received data.
504. Cancel pending SR trigger when data triggering the SR trigger is accounted for in a BSR, or when the data triggering the SR is included in a scheduled UL data transmission, whichever occurs first.
505. Cancel pending SR trigger at any time and keep track of data.
506. Send a SR only if the buffer comprises data that has not yet been accounted for in BSR.
End
End

Fig. 5

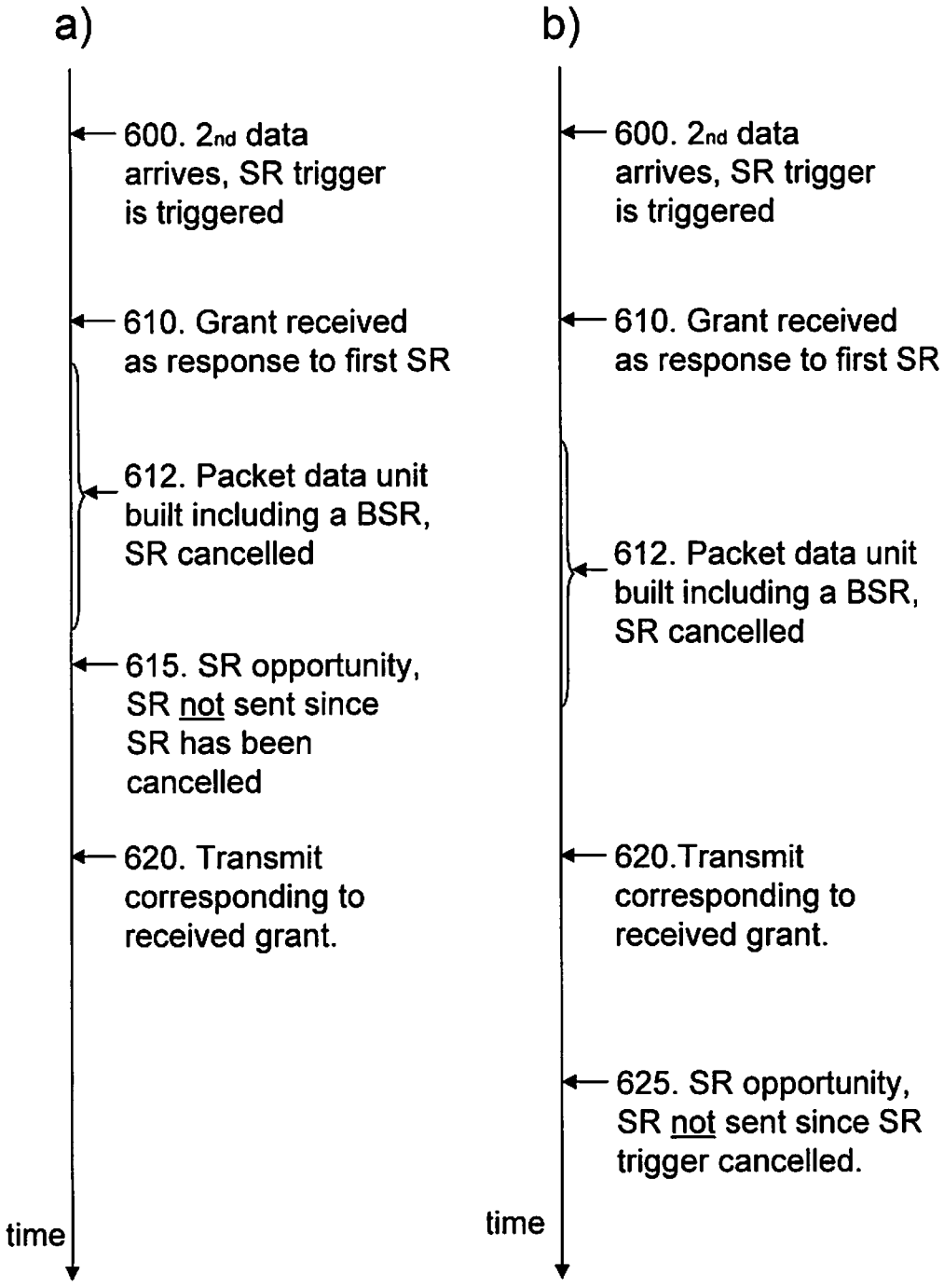

a)
600. 2nd data arrives, SR trigger is triggered
610. Grant received as response to first SR
612. Packet data unit built including a BSR, SR cancelled
615. SR opportunity, SR not sent since SR has been cancelled
620. Transmit corresponding to received grant.
time
b)
600. 2nd data arrives, SR trigger is triggered
610. Grant received as response to first SR
612. Packet data unit built including a BSR, SR cancelled
620.Transmit corresponding to received grant.
625. SR opportunity, SR not sent since SR trigger cancelled.
time

Fig. 6

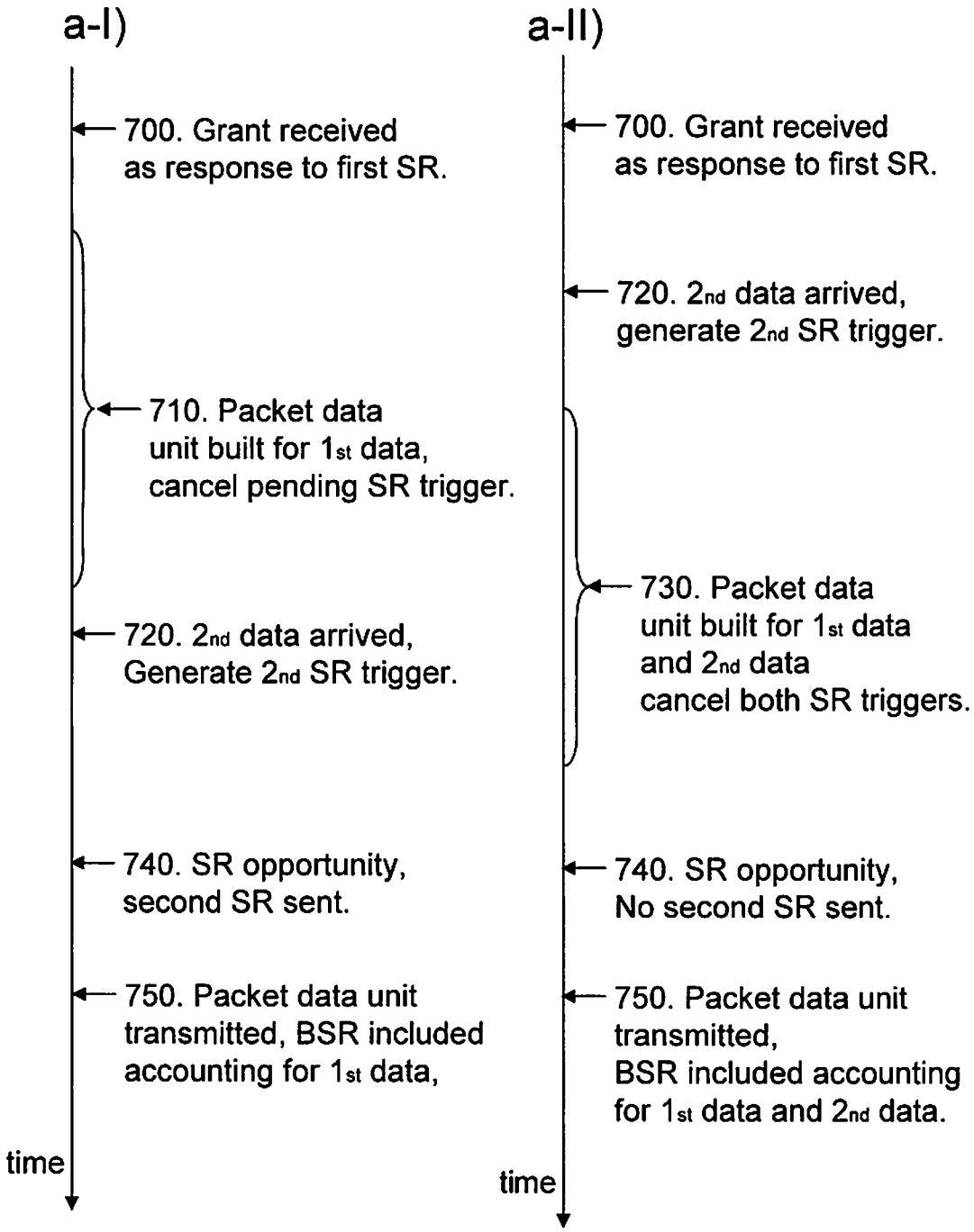

a-I)
700. Grant received as response to first SR.
710. Packet data unit built for 1st data, cancel pending SR trigger.
720. 2nd data arrived, Generate 2nd SR trigger.
740. SR opportunity, second SR sent.
750. Packet data unit transmitted, BSR included accounting for 1st data,
time
a-II)
700. Grant received as response to first SR.
720. 2nd data arrived, generate 2nd SR trigger.
730. Packet data unit built for 1st data and 2nd data cancel both SR triggers.
740. SR opportunity, No second SR sent.
750. Packet data unit transmitted, BSR included accounting for 1st data and 2nd data.
time

Fig. 7

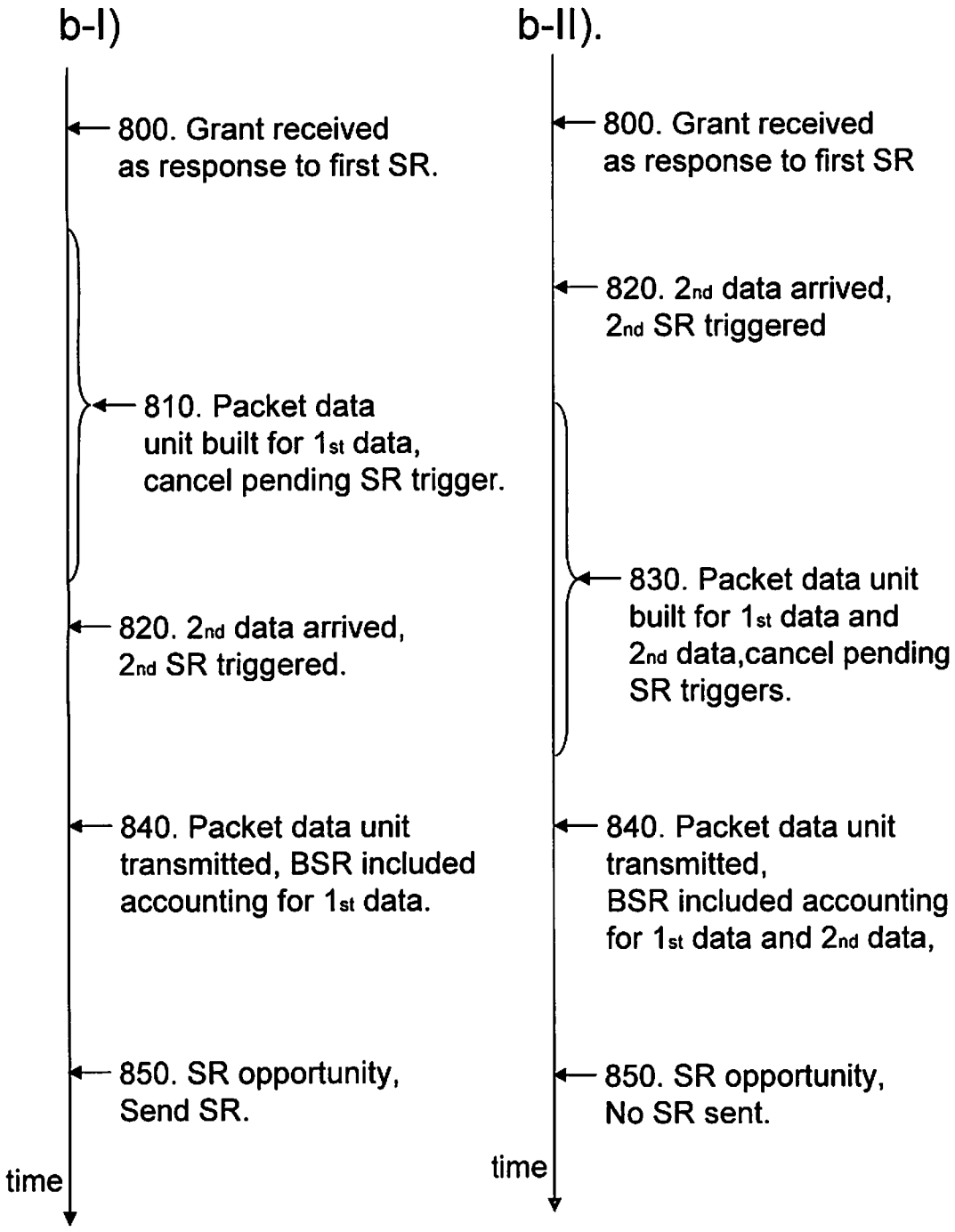

b-I)
800. Grant received as response to first SR.
810. Packet data unit built for 1st data, cancel pending SR trigger.
820. 2nd data arrived, 2nd SR triggered.
840. Packet data unit transmitted, BSR included accounting for 1st data.
850. SR opportunity, Send SR.
time
b-II).
800. Grant received as response to first SR
820. 2nd data arrived, 2nd SR triggered
830. Packet data unit built for 1st data and 2nd data,cancel pending SR triggers.
840. Packet data unit transmitted, BSR included accounting for 1st data and 2nd data,
850. SR opportunity, No SR sent.
time

Fig. 8

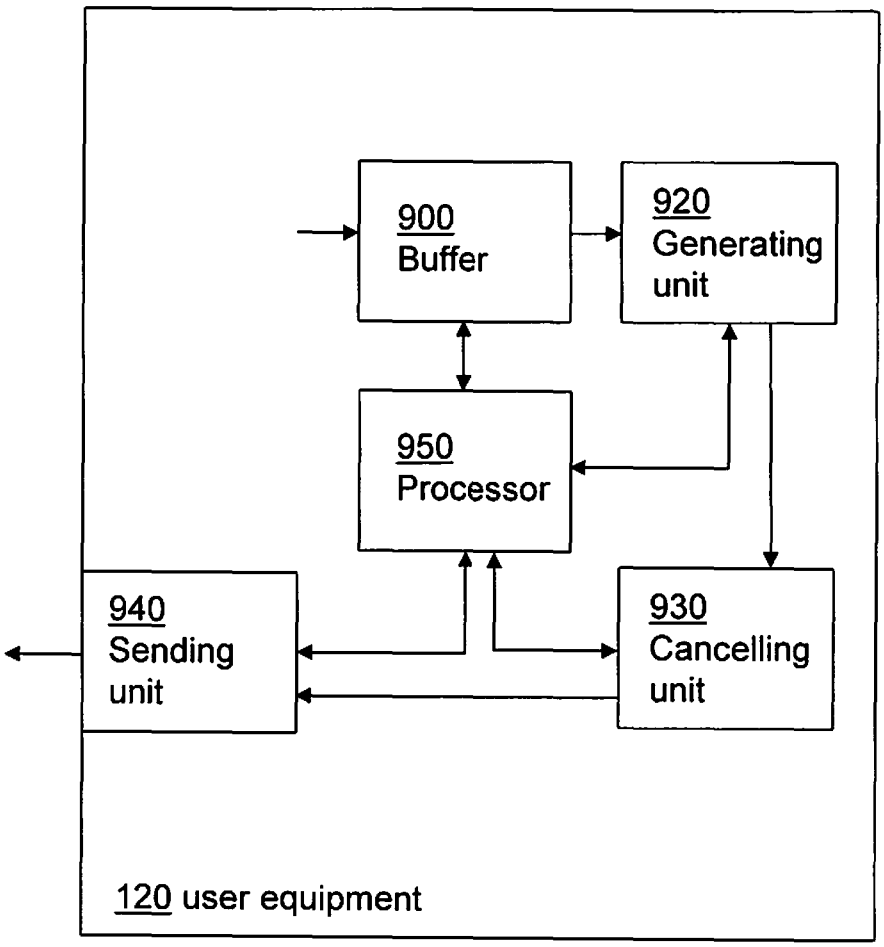

900
Buffer
920
Generating unit
950
Processor
940
Sending unit
930
Cancelling unit
120 user equipment

Fig. 9

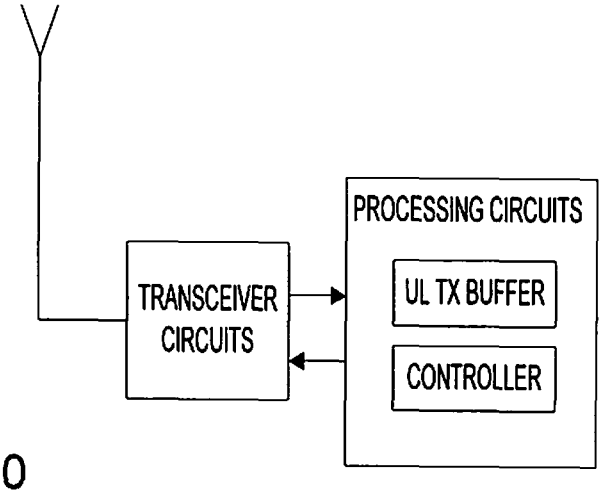

PROCESSING CIRCUITS
UL TX BUFFER
CONTROLLER
TRANSCEIVER CIRCUITS

Fig. 10