

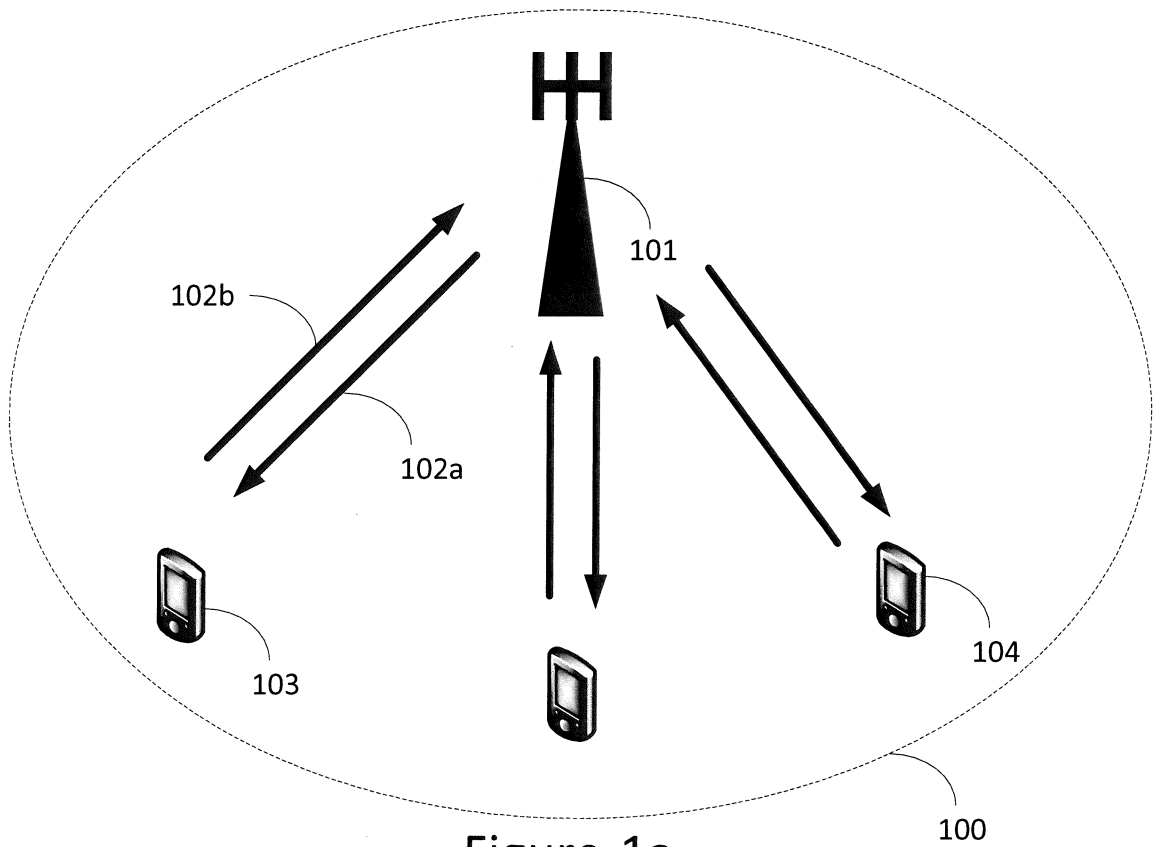


Figure-1a
(Prior Art)

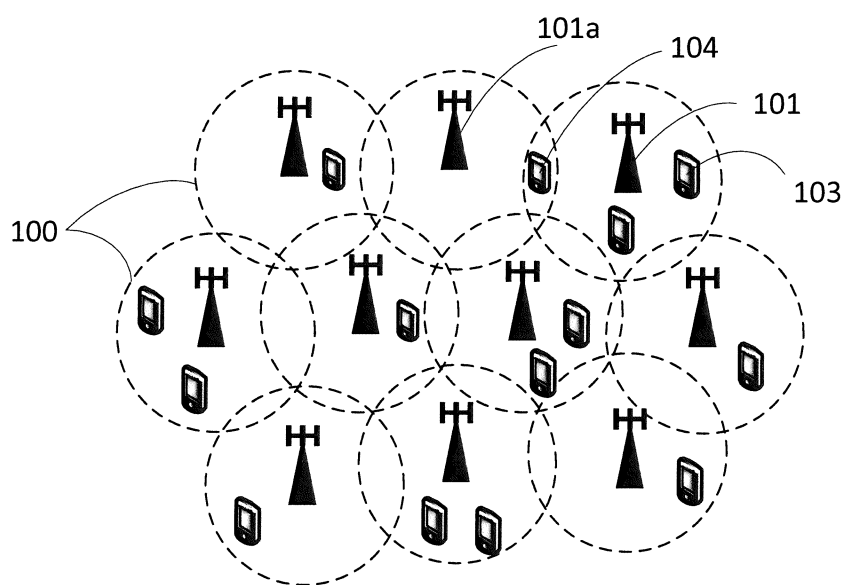


Figure-1b
(Prior art)

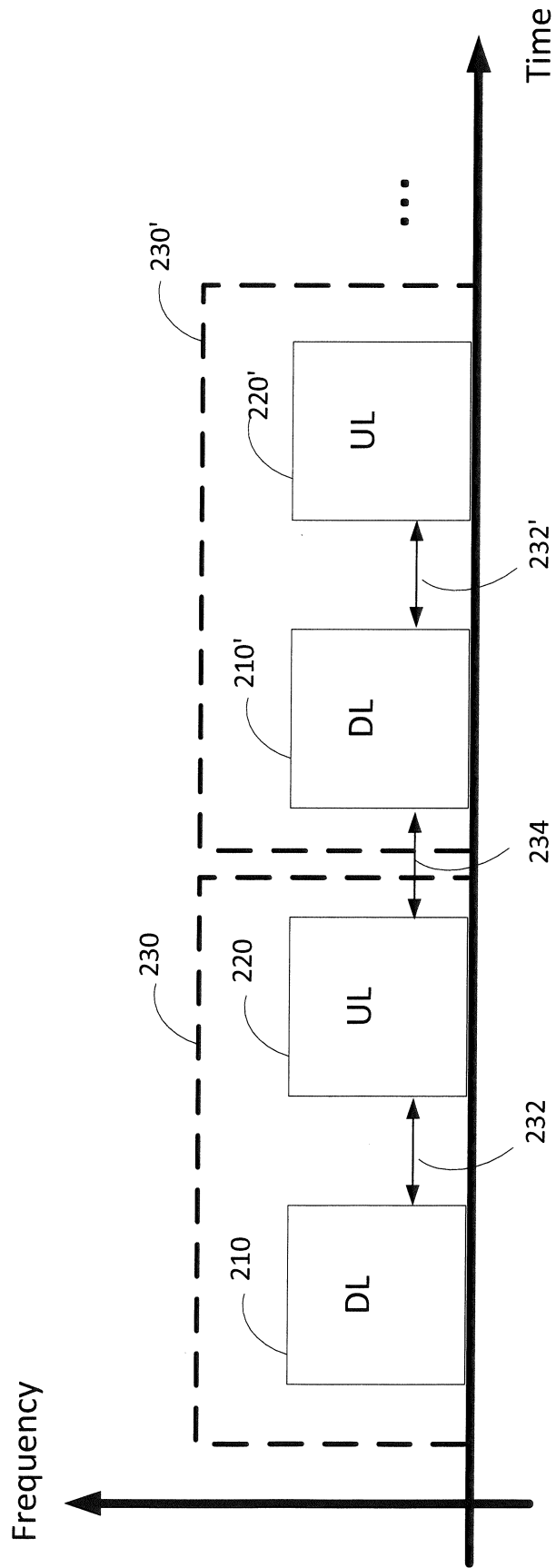


Figure-2a
(Prior art)

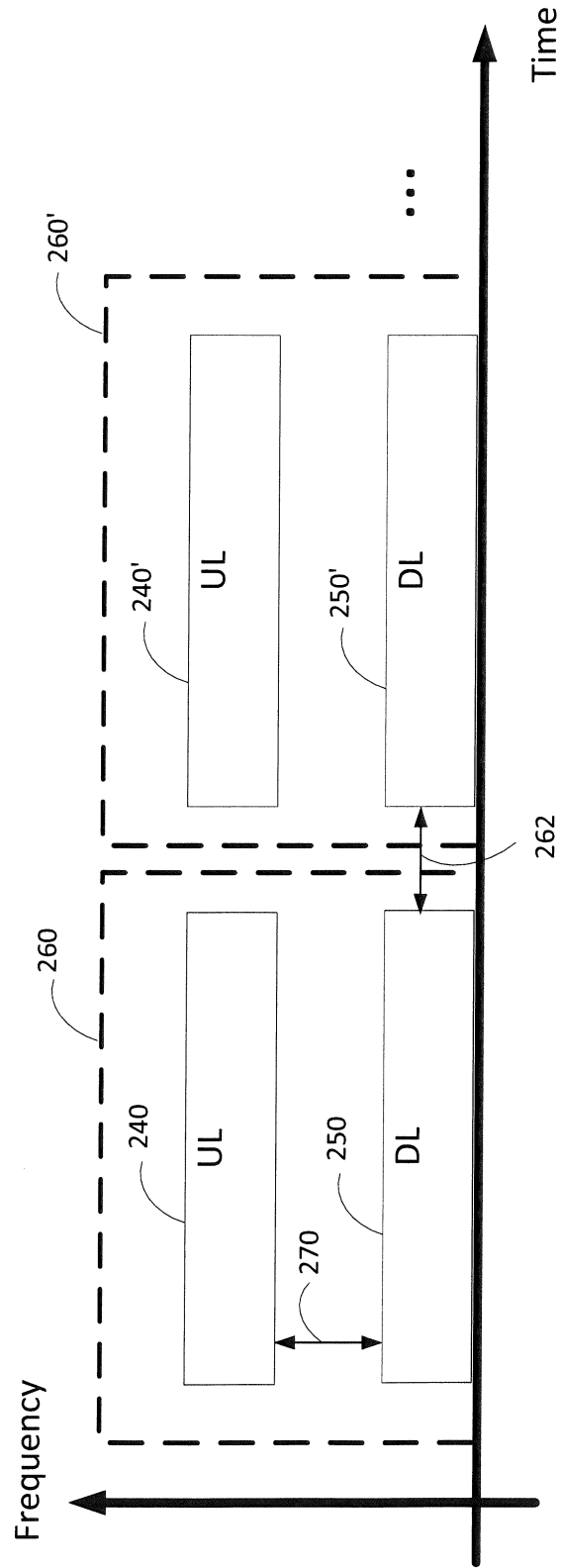


Figure-2b
(Prior art)

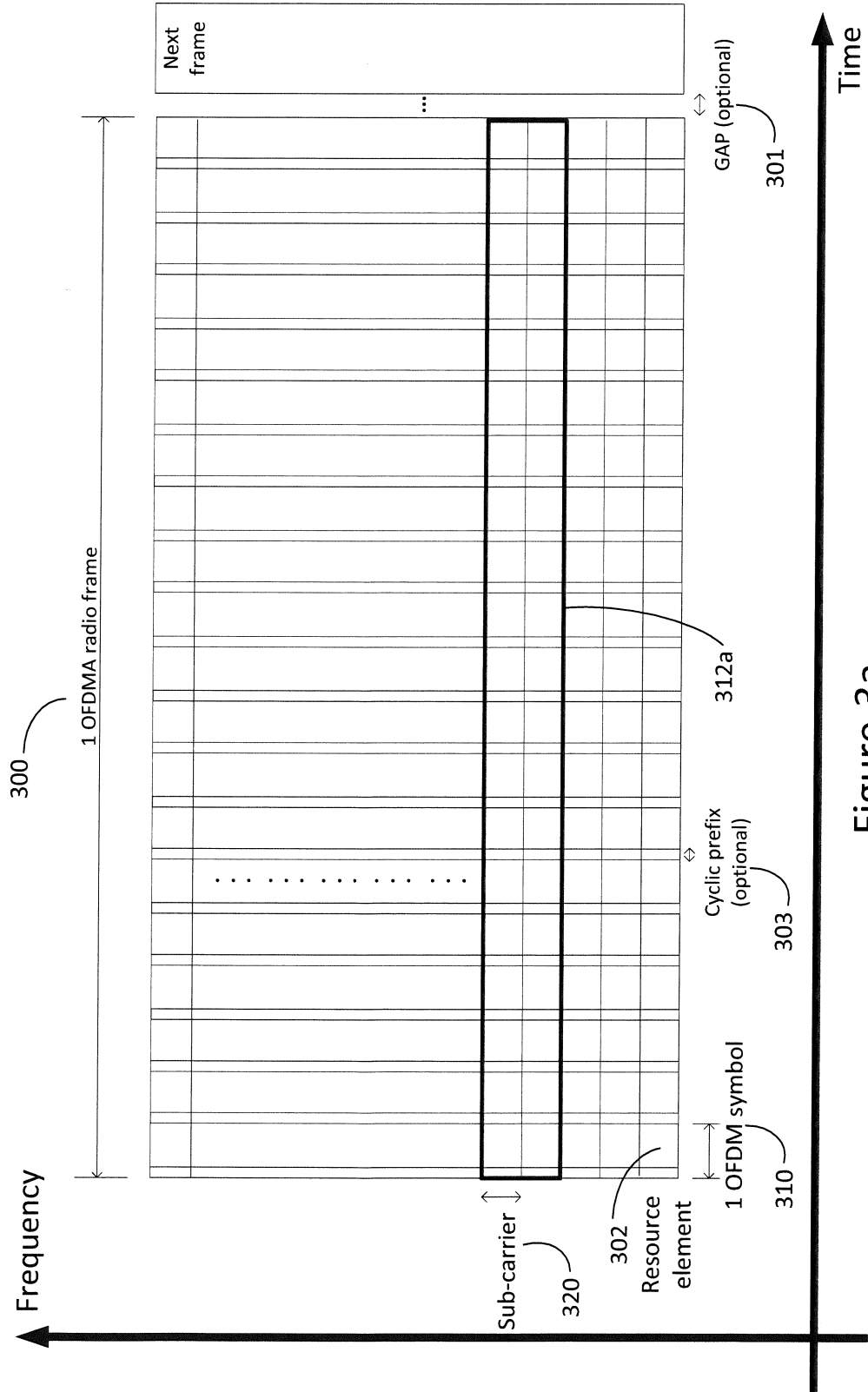


Figure-3a
(Prior art)

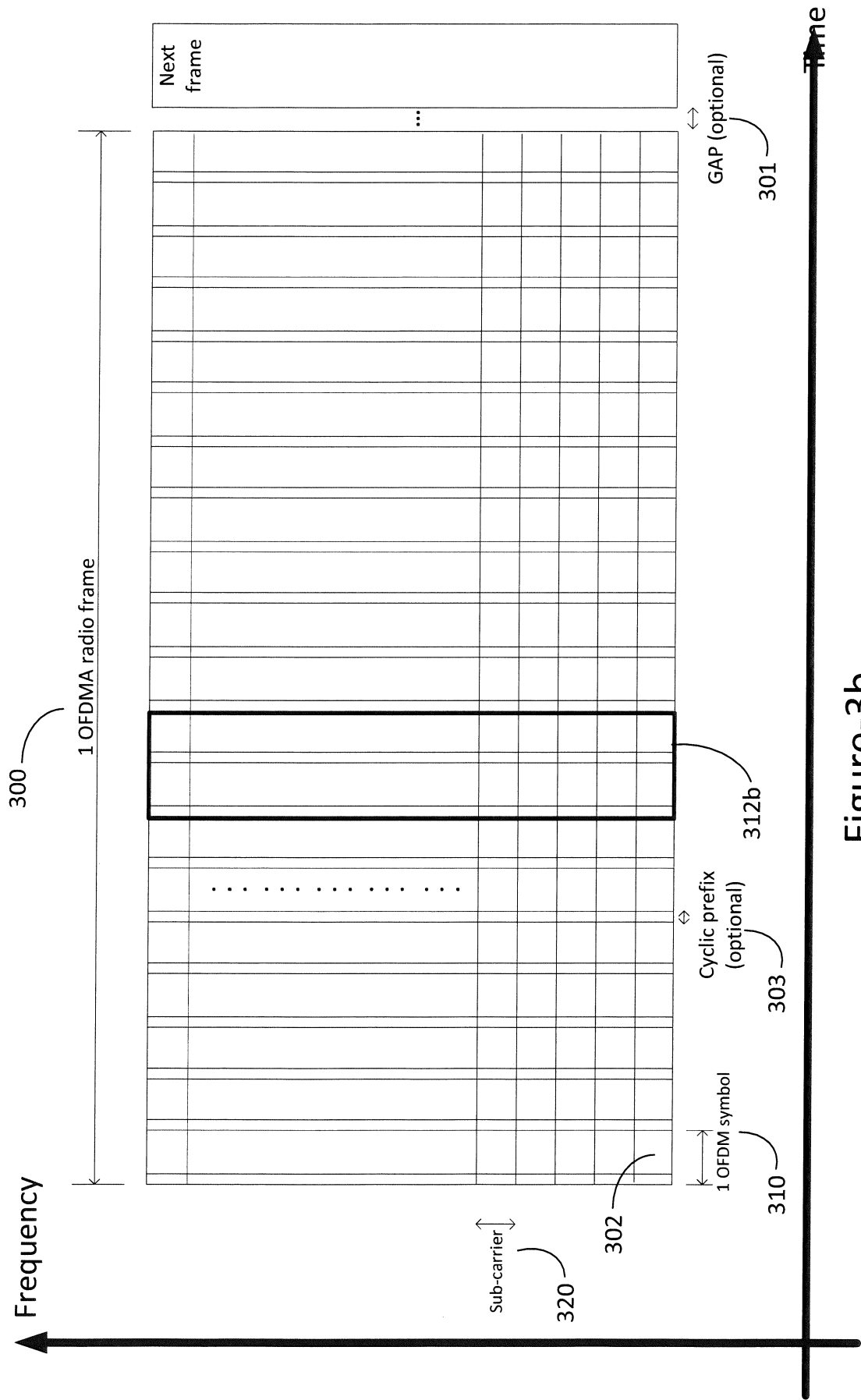


Figure-3b
(Prior art)

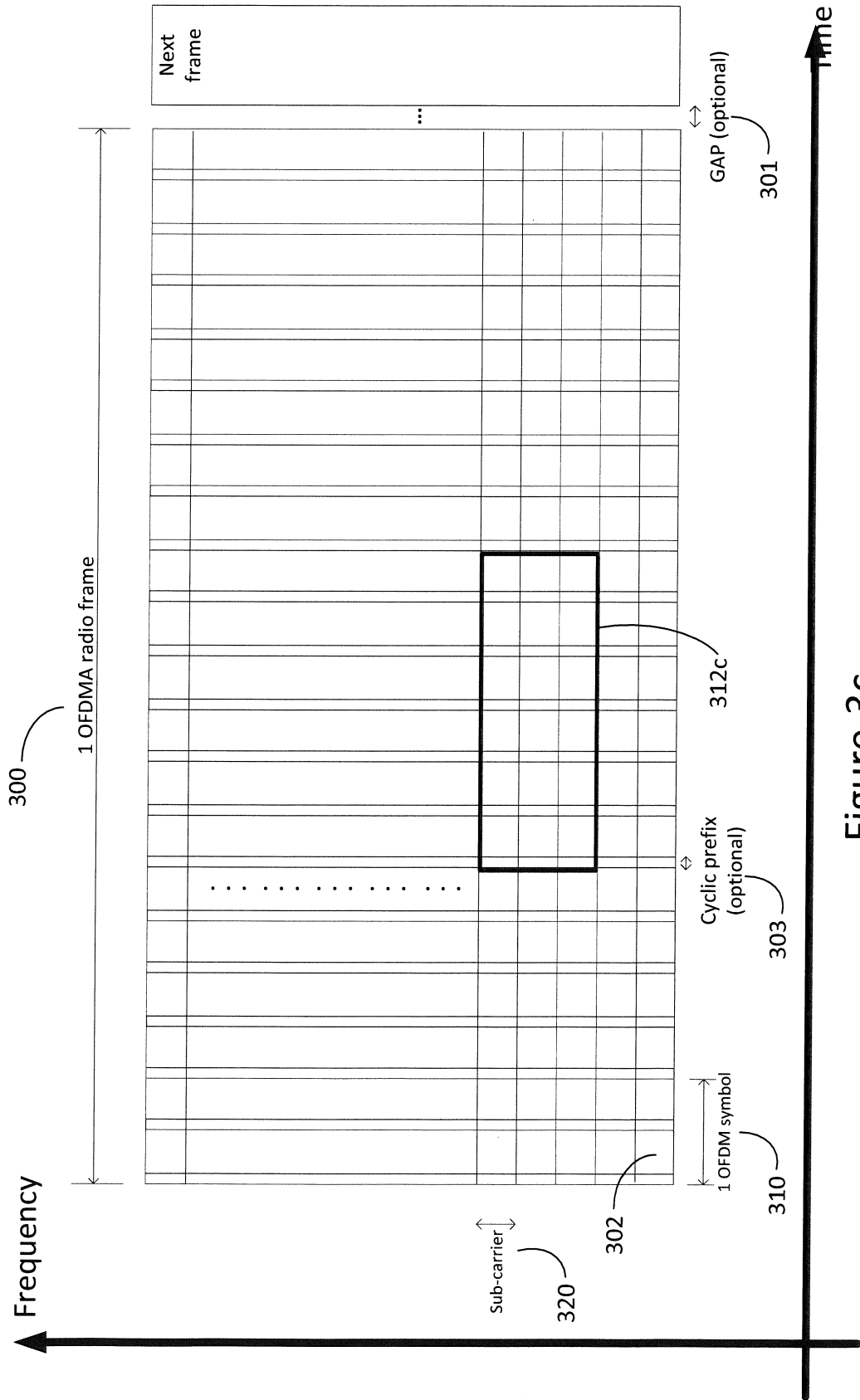


Figure-3c
(Prior art)

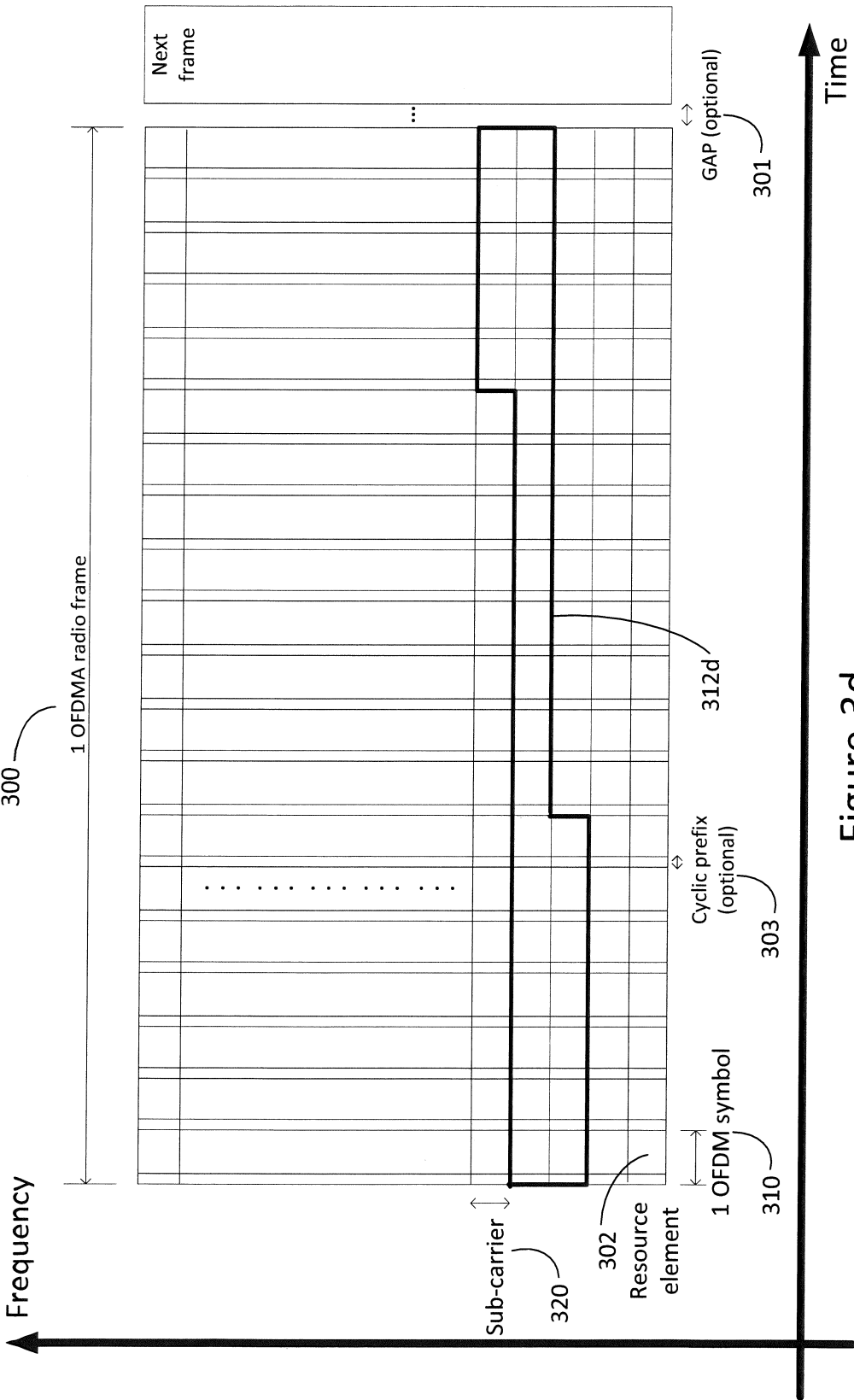


Figure-3d
(Prior art)

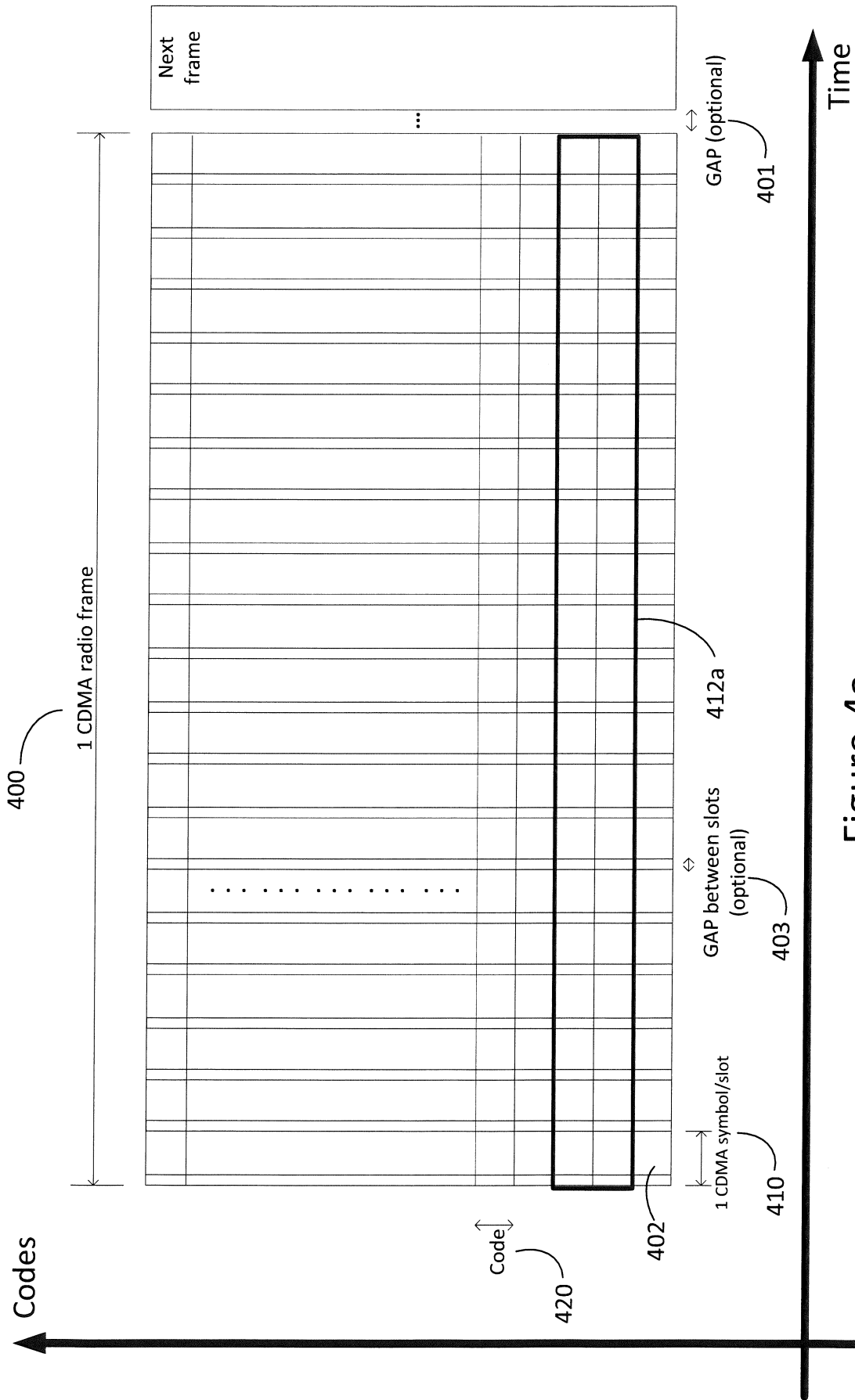


Figure-4a
(Prior art)

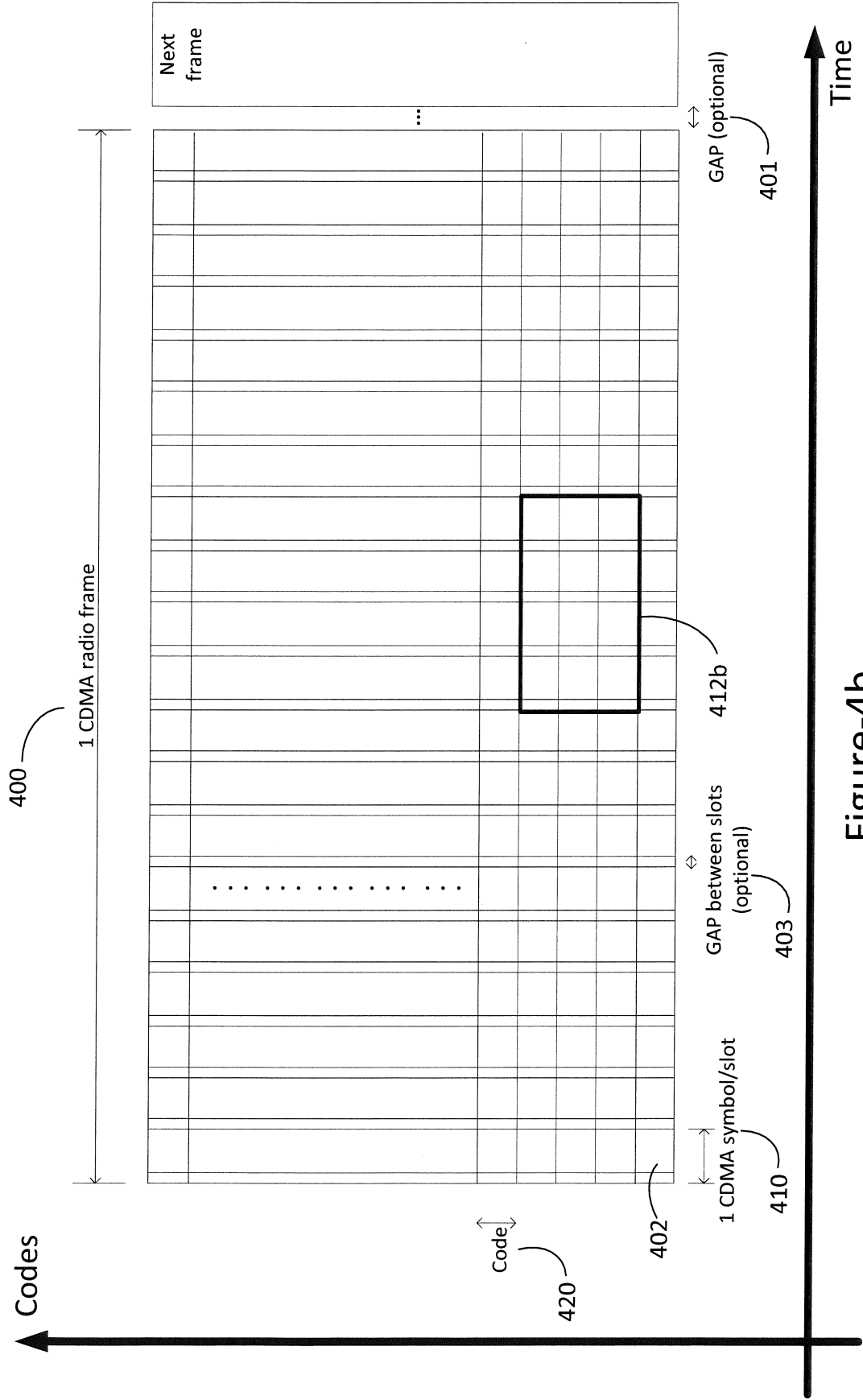


Figure-4b
(Prior art)

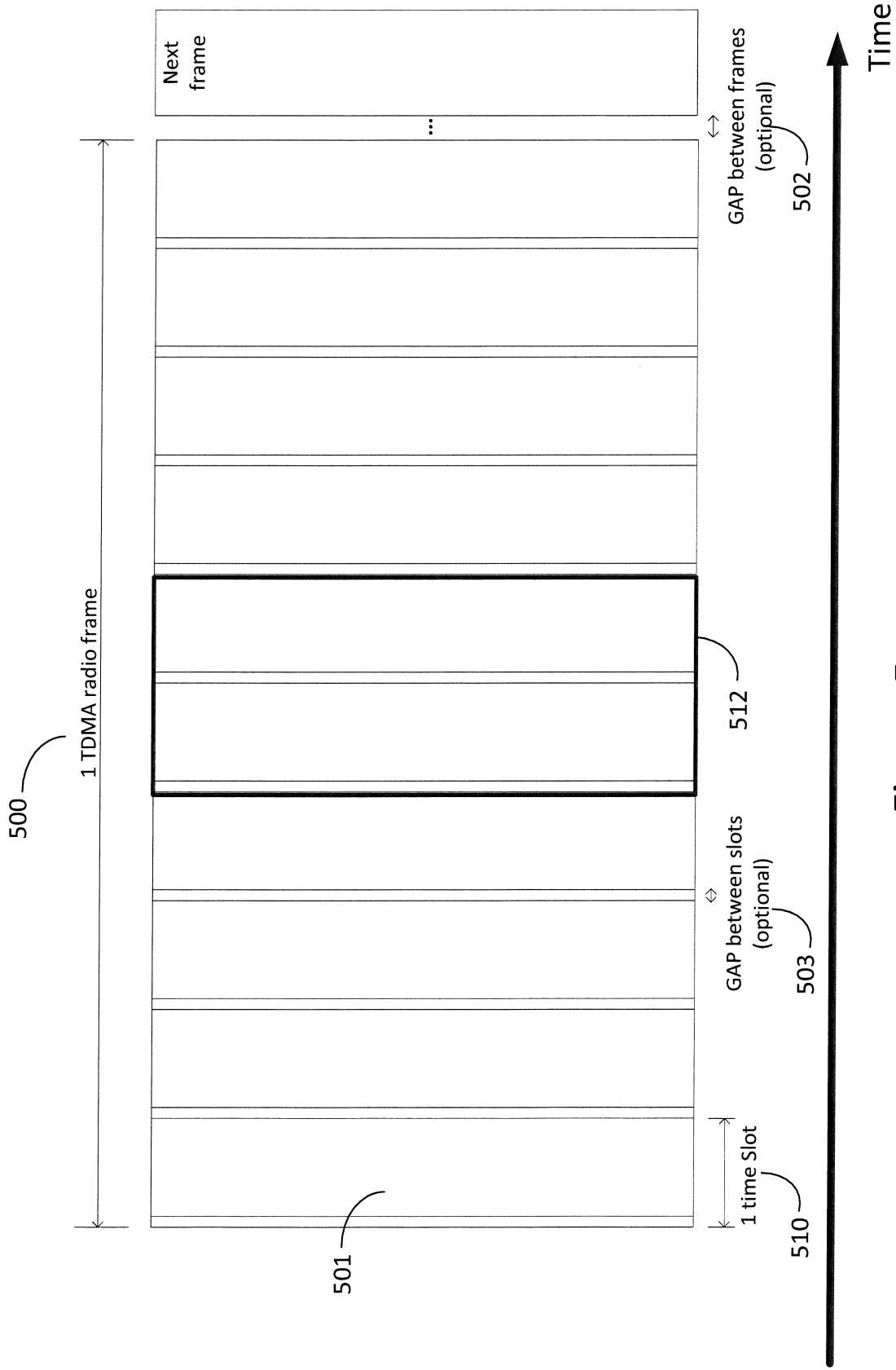


Figure-5
(Prior art)

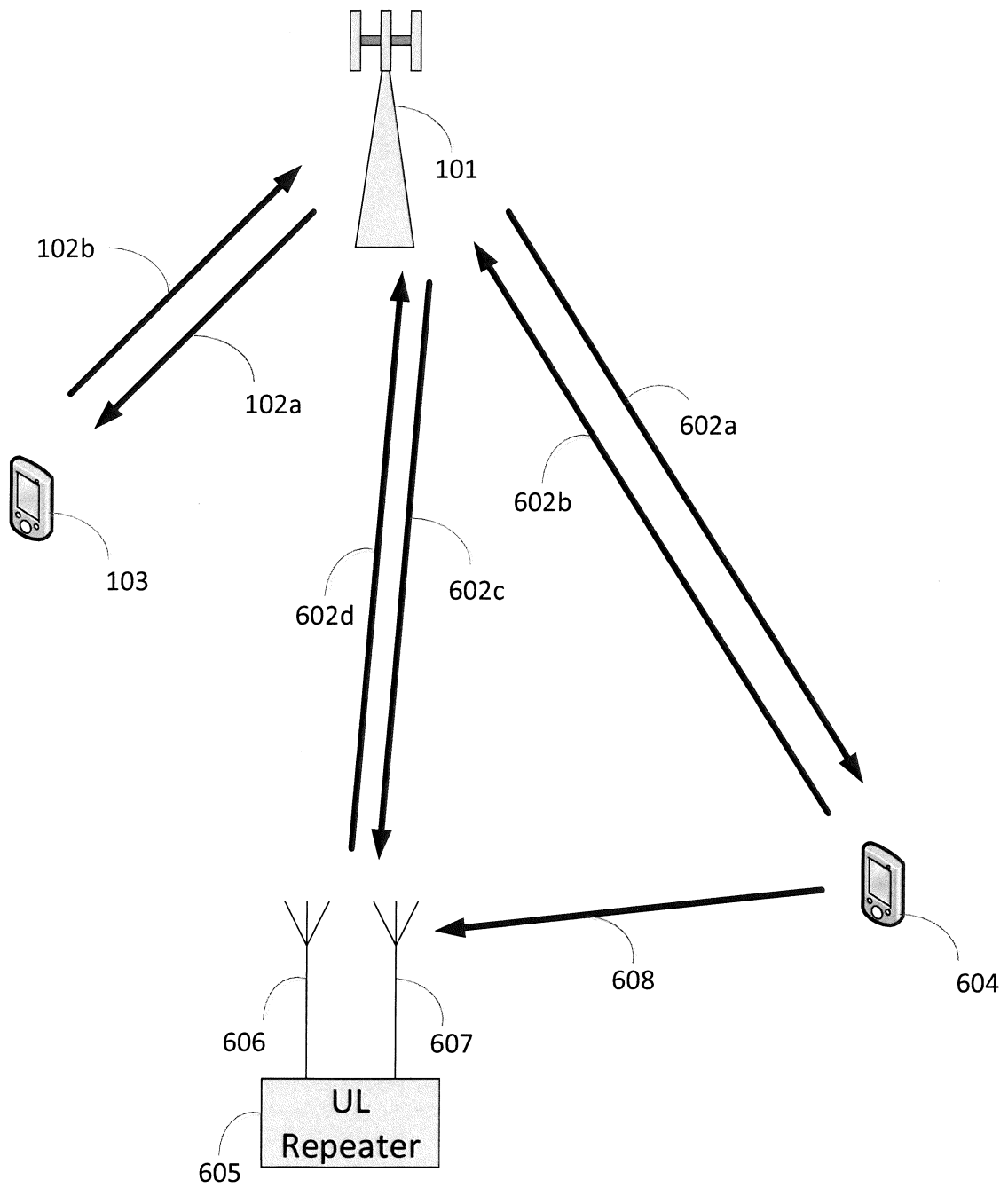


Figure-6

Fig. 7

Operation A. Receive DL signal from BS whose cell the uplink repeater is serving



Operation B. For at least one DL frame or sub-frame transmitted by the BS and received by the repeater, e.g. a most recent downlink frame F, demodulate, extract the map information (or any equivalent), map_i, which describes allocation of UL transmissions



Operation C. Determine the specific UL transmissions allocations (e.g. resource blocks or bursts) which are to be repeated, e.g. the UL transmissions of a mobile station



Operation d. For each UL transmission allocation which is to be repeated, receive the next UL transmission from the MS M which the repeater is “helping” or serving, and repeat, sending the repeated content in the allocations (e.g. time-frequency regions) allocated to M, either within the upcoming uplink frame or within an uplink frame which follows the upcoming uplink frame

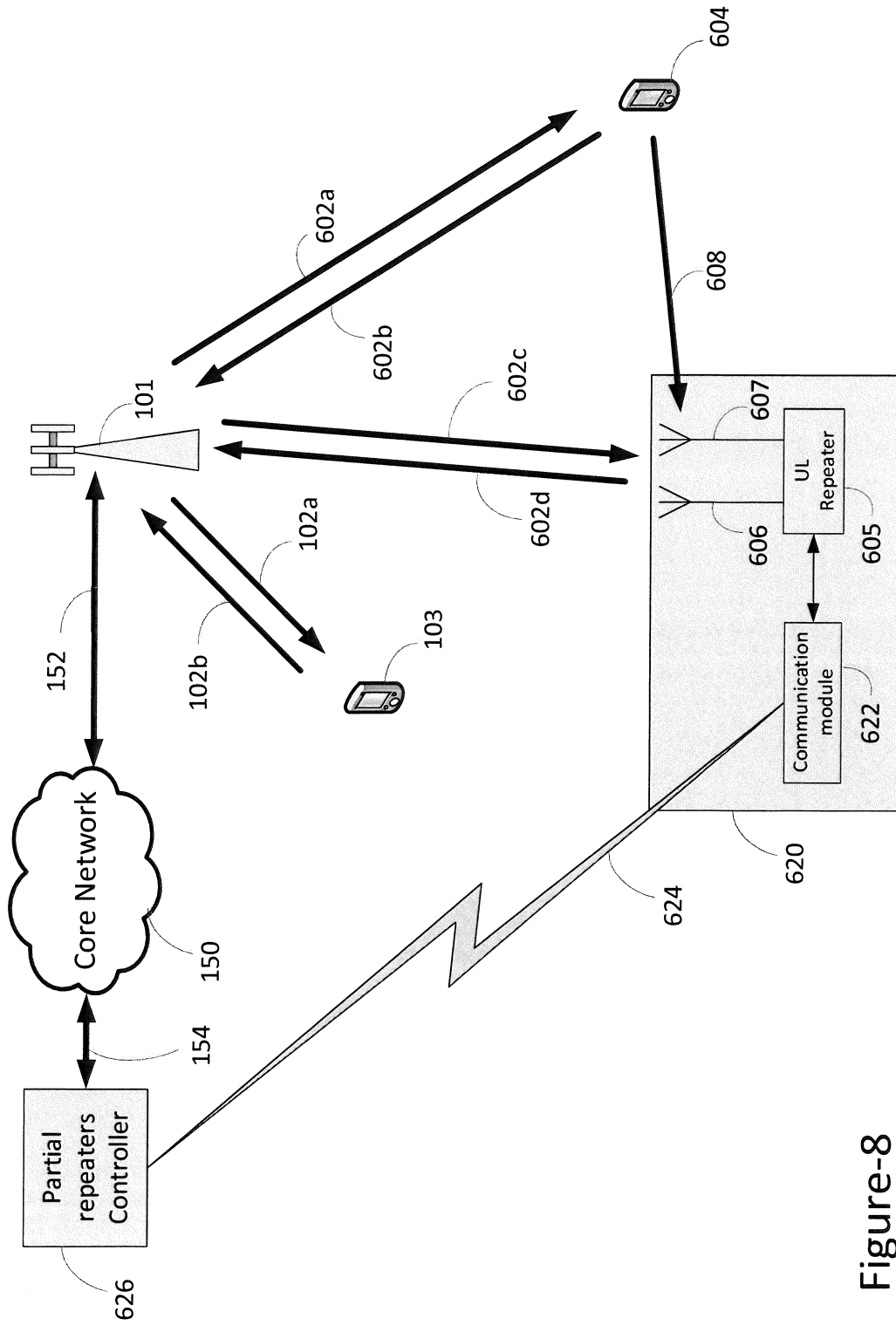


Figure-8

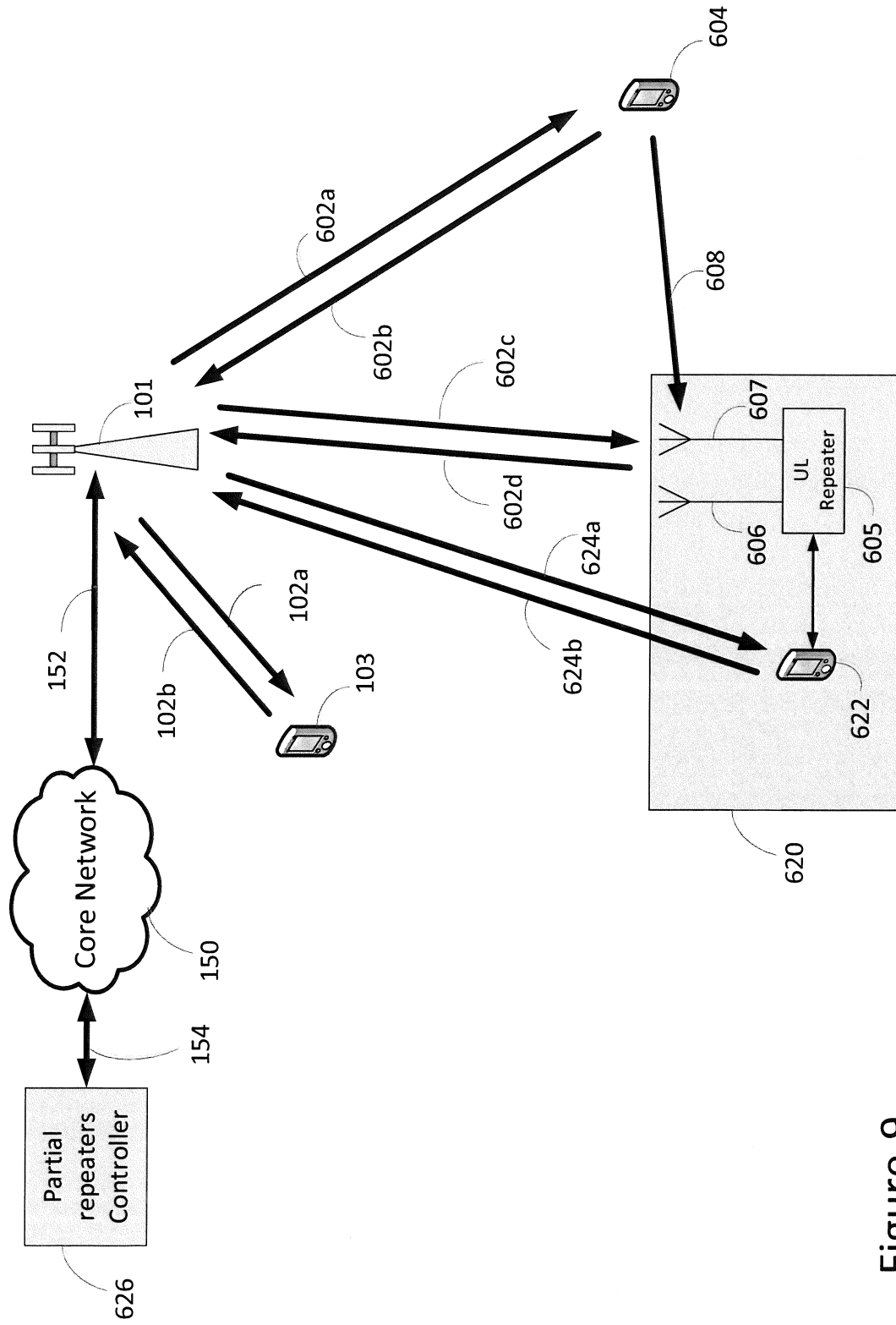


Figure-9

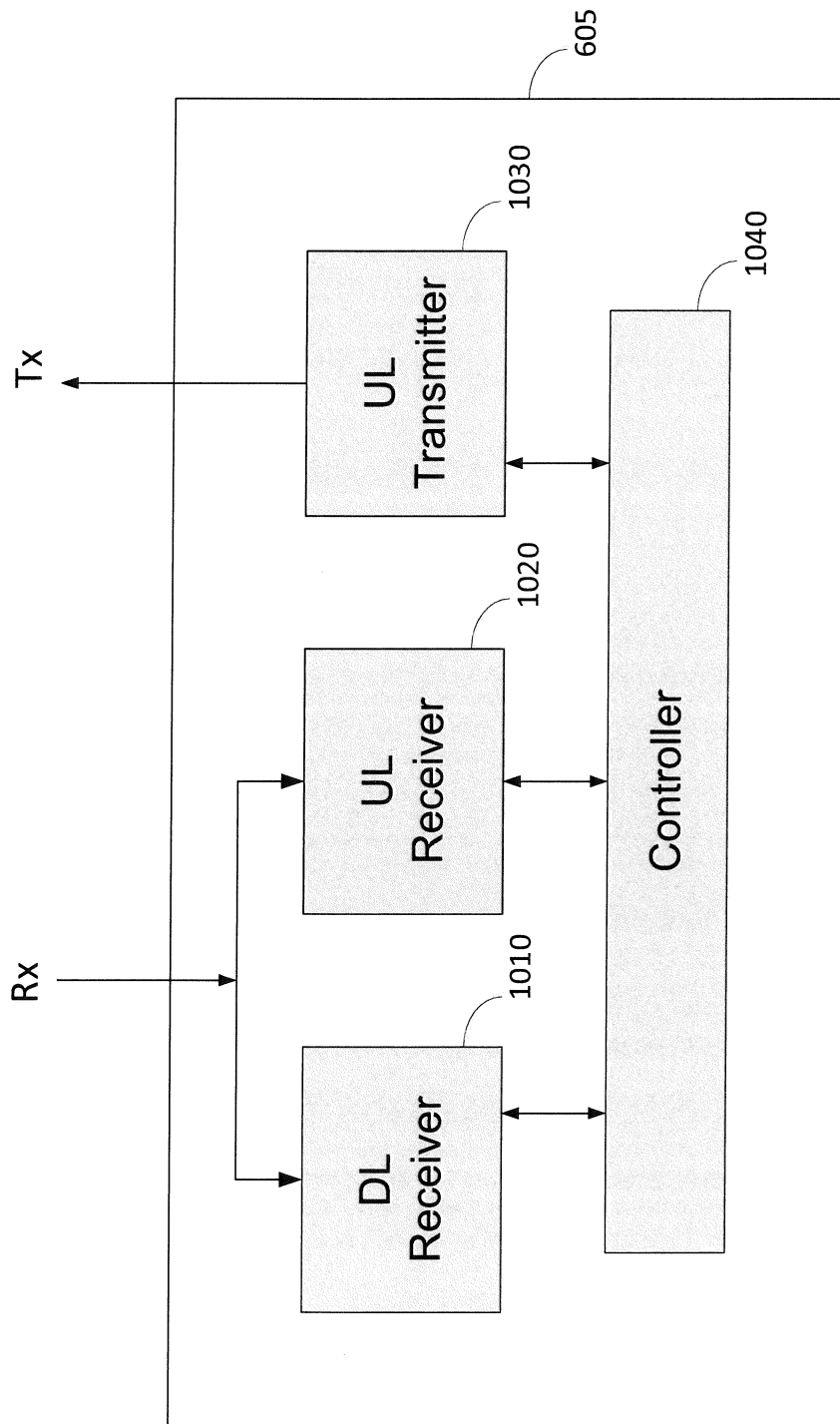


Figure-10

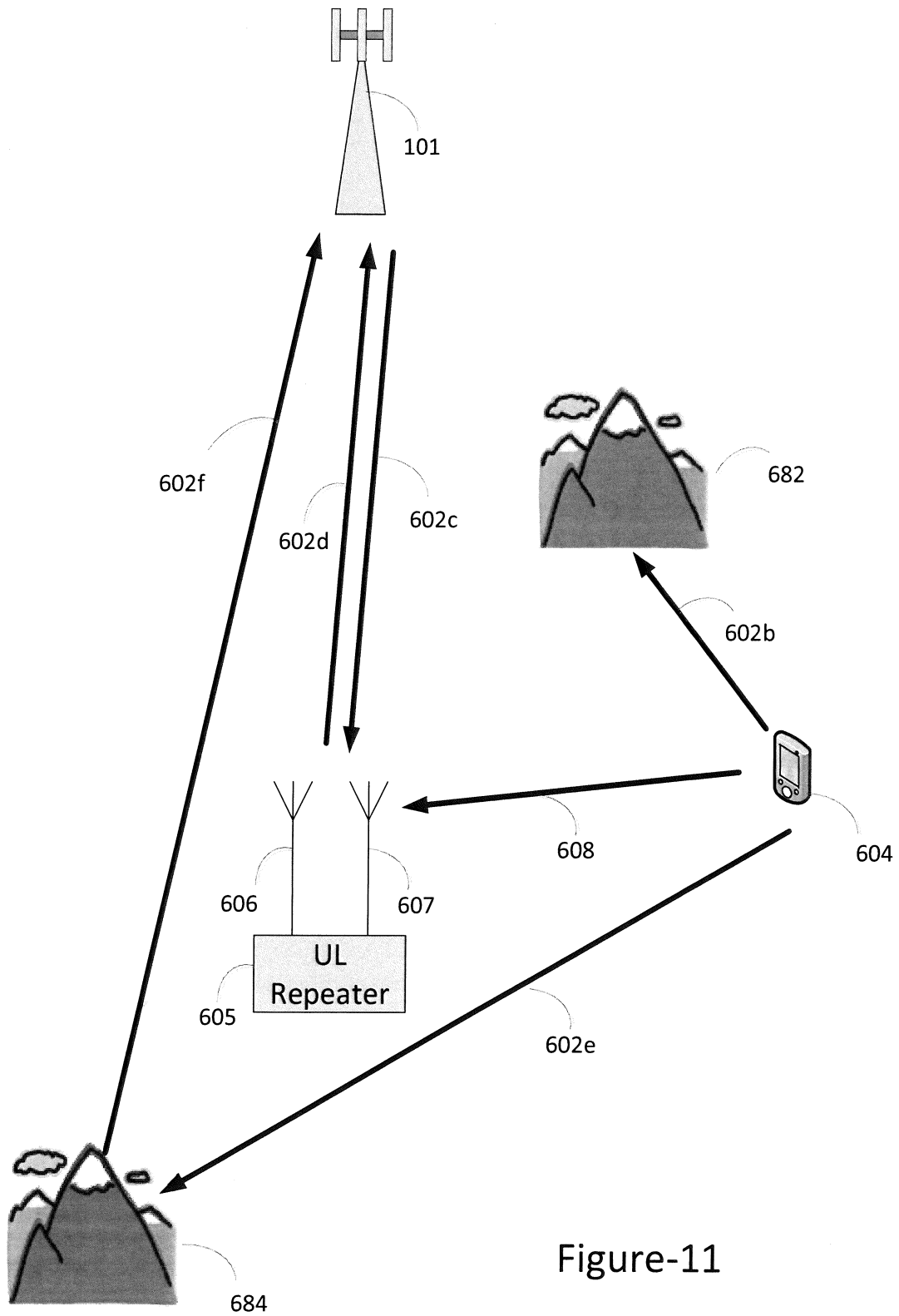


Figure-11