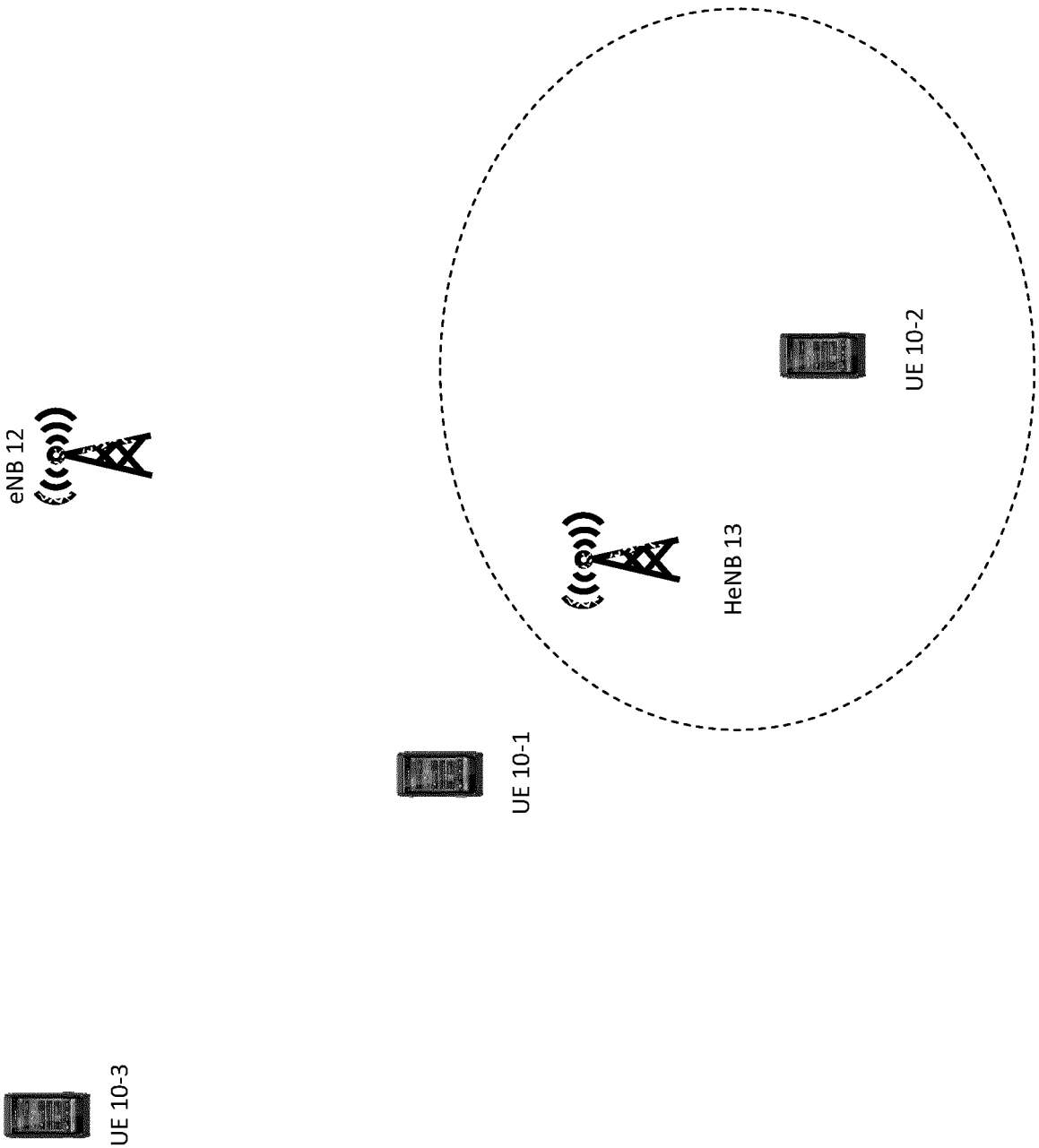


Fig. 1

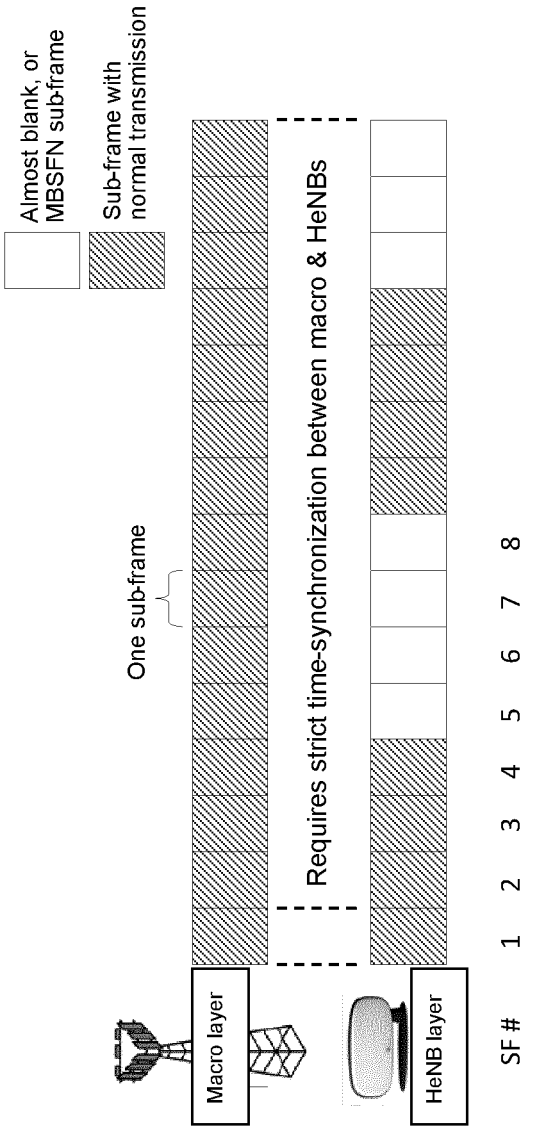

Almost blank, or MBSFN sub-frame
Sub-frame with normal transmission
One sub-frame
Requires strict time-synchronization between macro & HeNBs
Macro layer
HeNB layer
SF # 1 2 3 4 5 6 7 8

Fig. 2

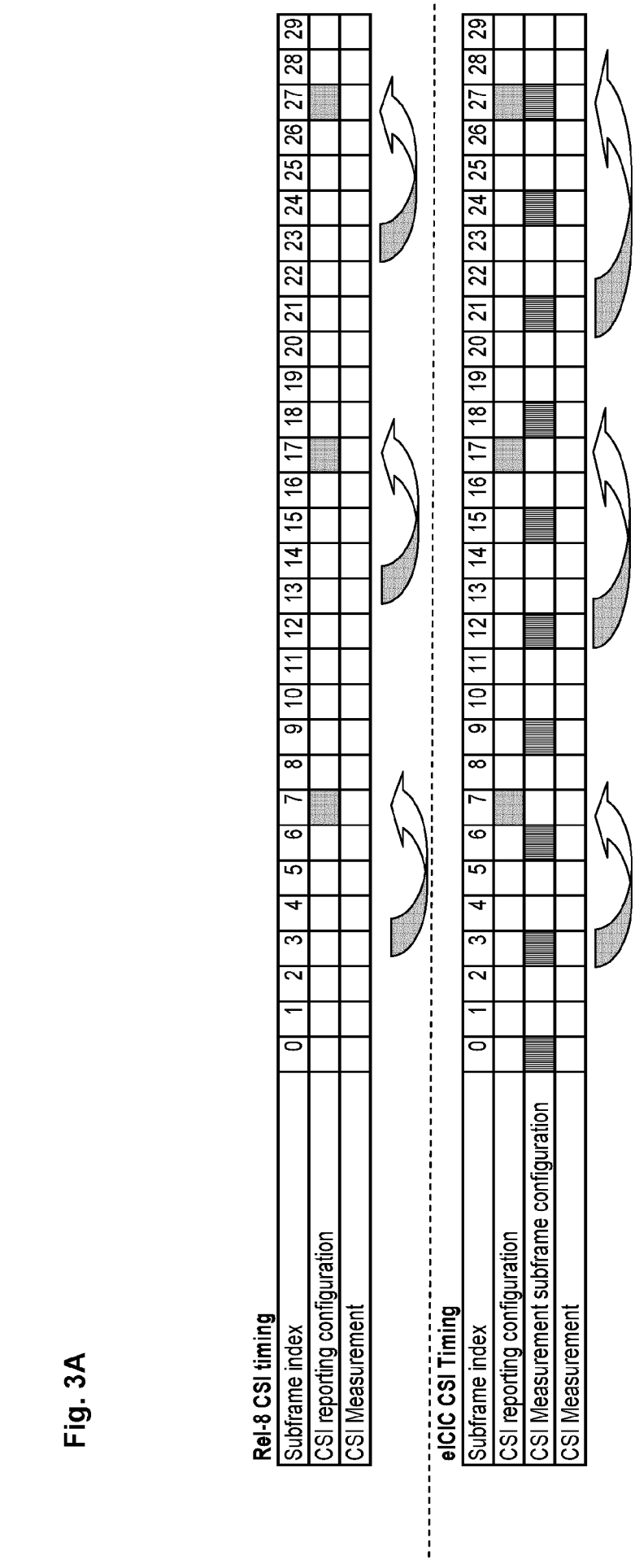

Rel-8 CSI timing
Subframe index
CSI reporting configuration
CSI Measurement
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29
eICIC CSI Timing
Subframe index
CSI reporting configuration
CSI Measurement subframe configuration
CSI Measurement
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Fig. 3A

Fig. 3B

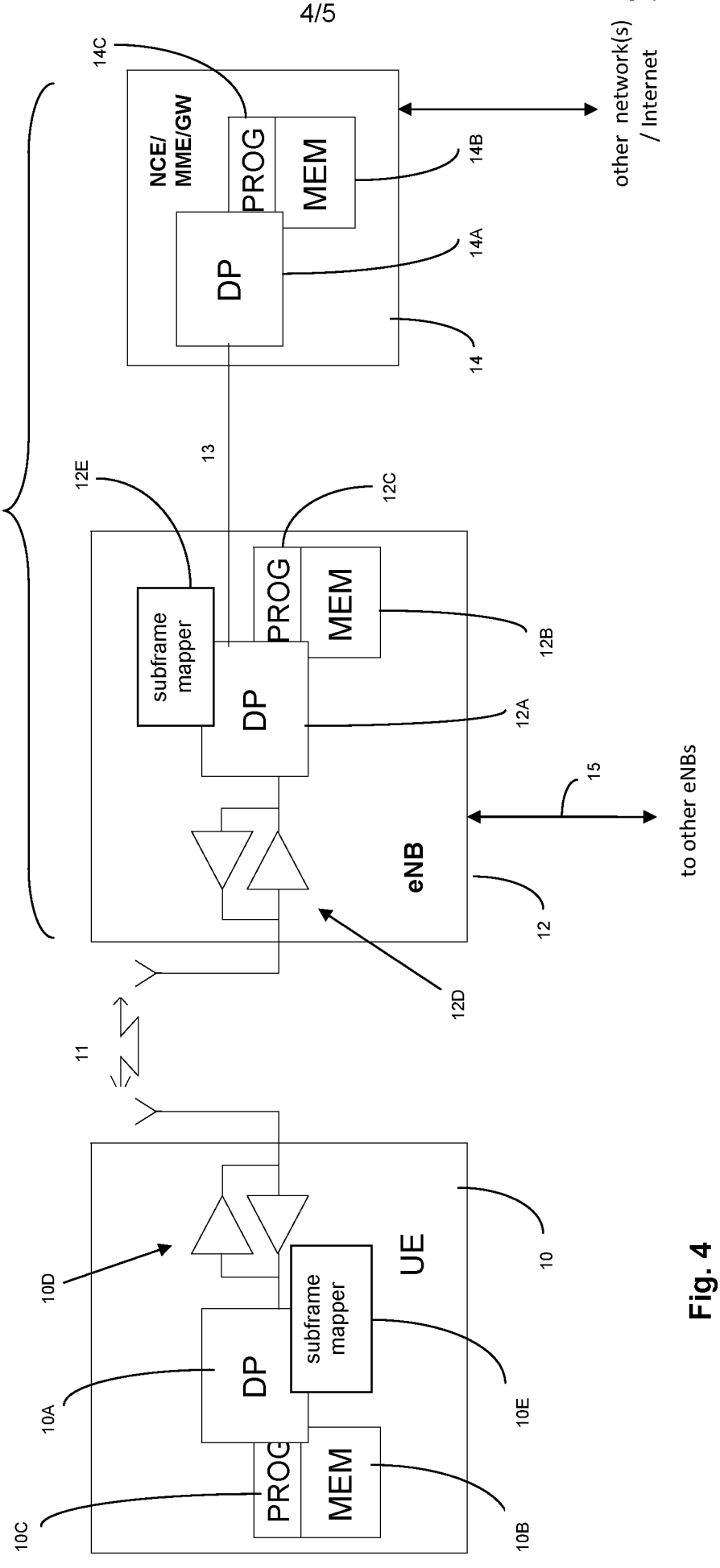

wireless network 1
NCE/
MME/GW
PROG
MEM
DP
14C
14B
14A
14
other network(s)
/ Internet
13
12E
12C
subframe
mapper
PROG
MEM
DP
12B
12A
eNB
12
15
to other eNBs
12D
11
10D
10A
DP
subframe
mapper
UE
10
10E
10C
PROG
MEM
10B

Fig. 4

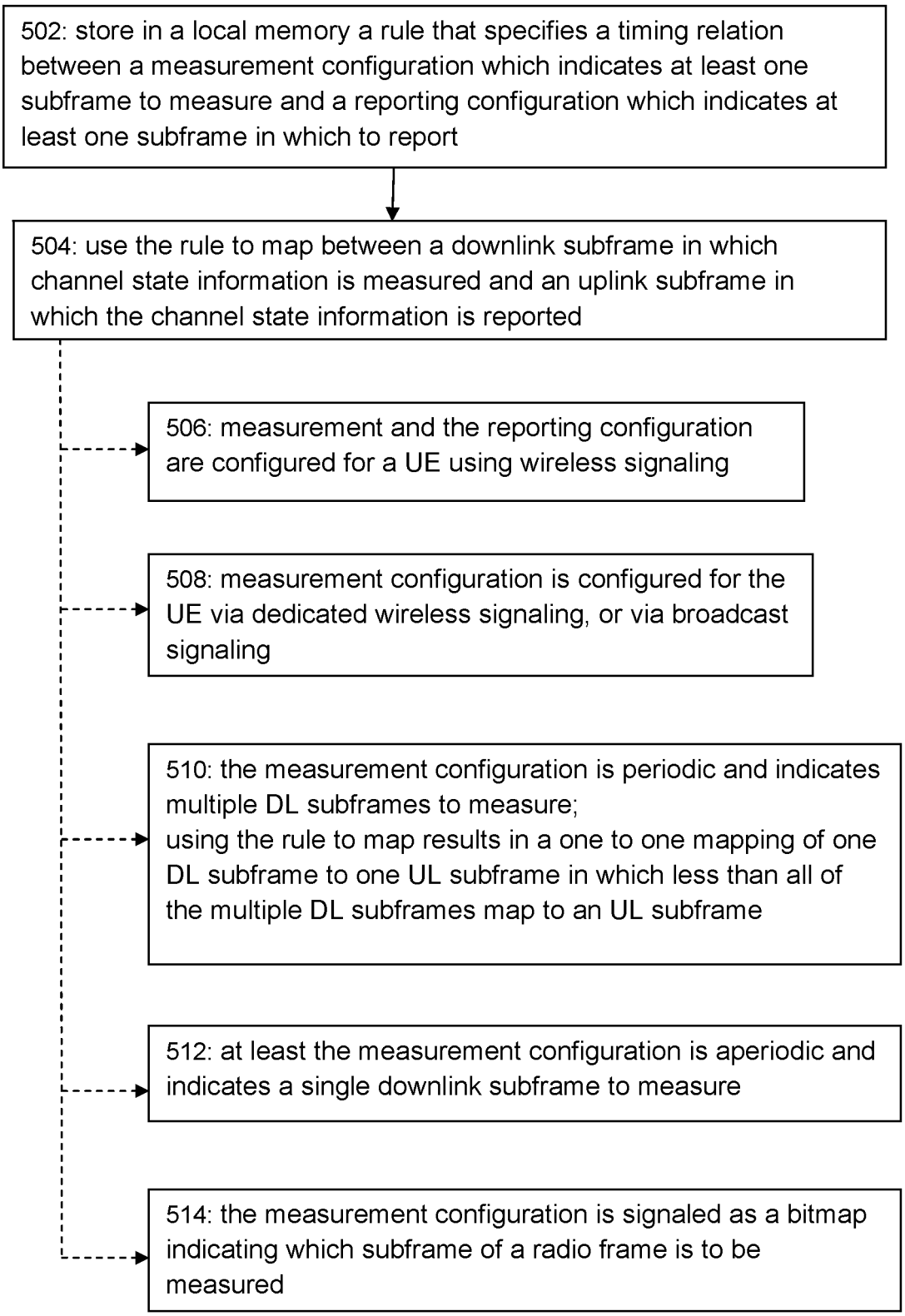

502: store in a local memory a rule that specifies a timing relation between a measurement configuration which indicates at least one subframe to measure and a reporting configuration which indicates at least one subframe in which to report
504: use the rule to map between a downlink subframe in which channel state information is measured and an uplink subframe in which the channel state information is reported
506: measurement and the reporting configuration are configured for a UE using wireless signaling
508: measurement configuration is configured for the UE via dedicated wireless signaling, or via broadcast signaling
510: the measurement configuration is periodic and indicates multiple DL subframes to measure;
using the rule to map results in a one to one mapping of one DL subframe to one UL subframe in which less than all of the multiple DL subframes map to an UL subframe
512: at least the measurement configuration is aperiodic and indicates a single downlink subframe to measure
514: the measurement configuration is signaled as a bitmap indicating which subframe of a radio frame is to be measured

Fig. 5