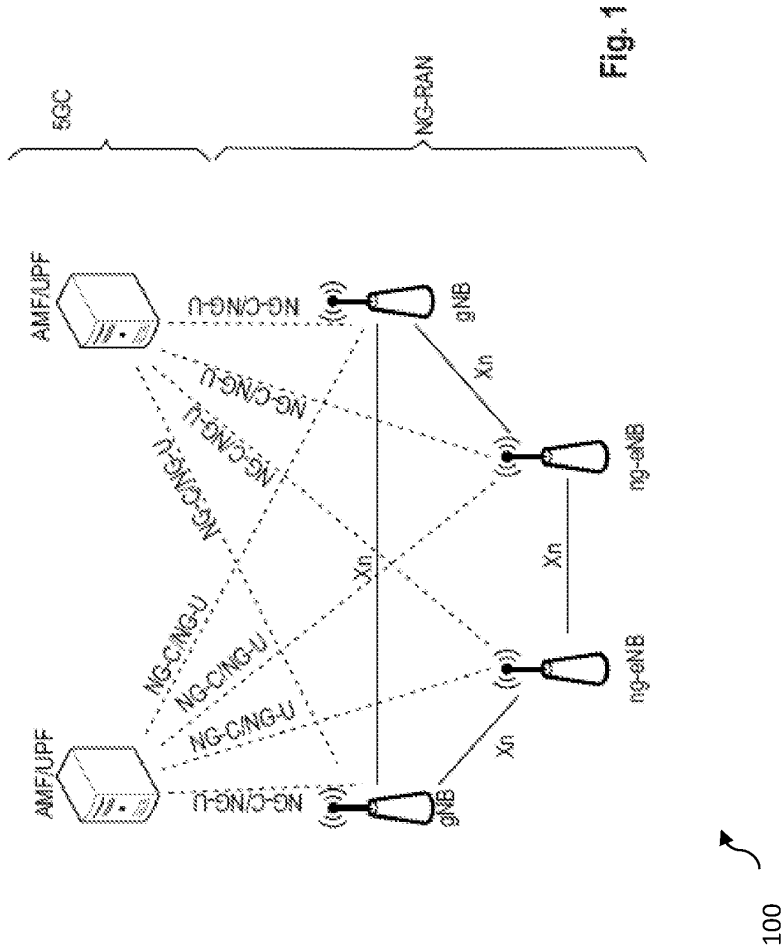




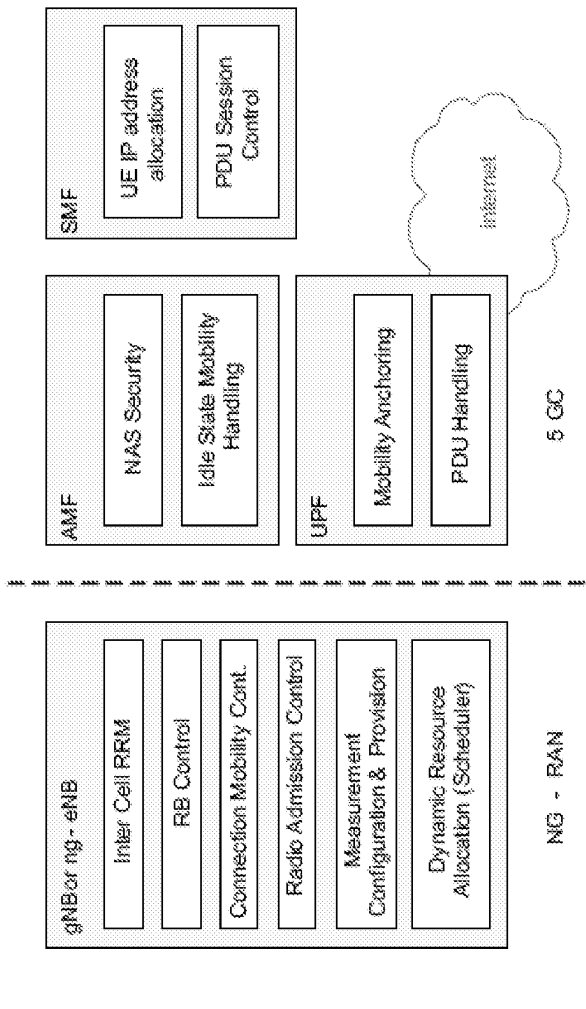


Fig. 2

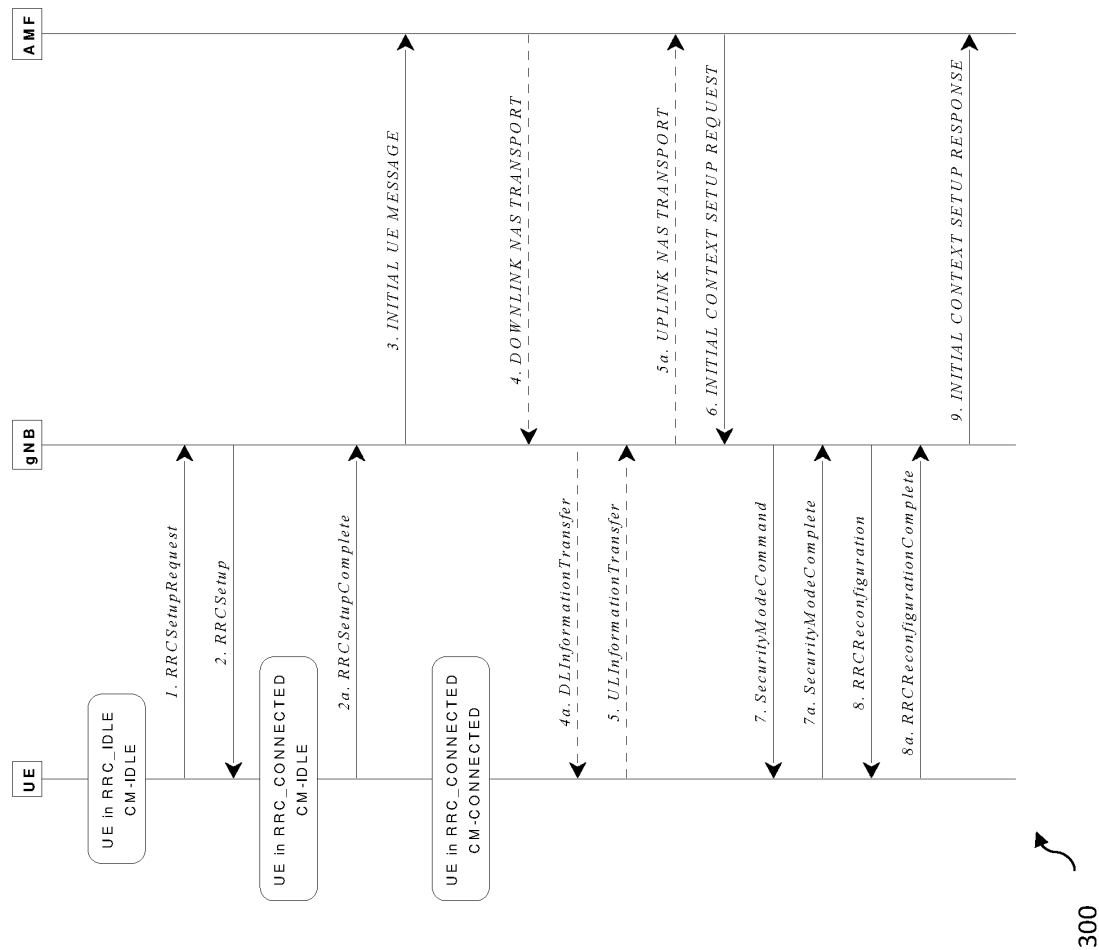


Fig. 3

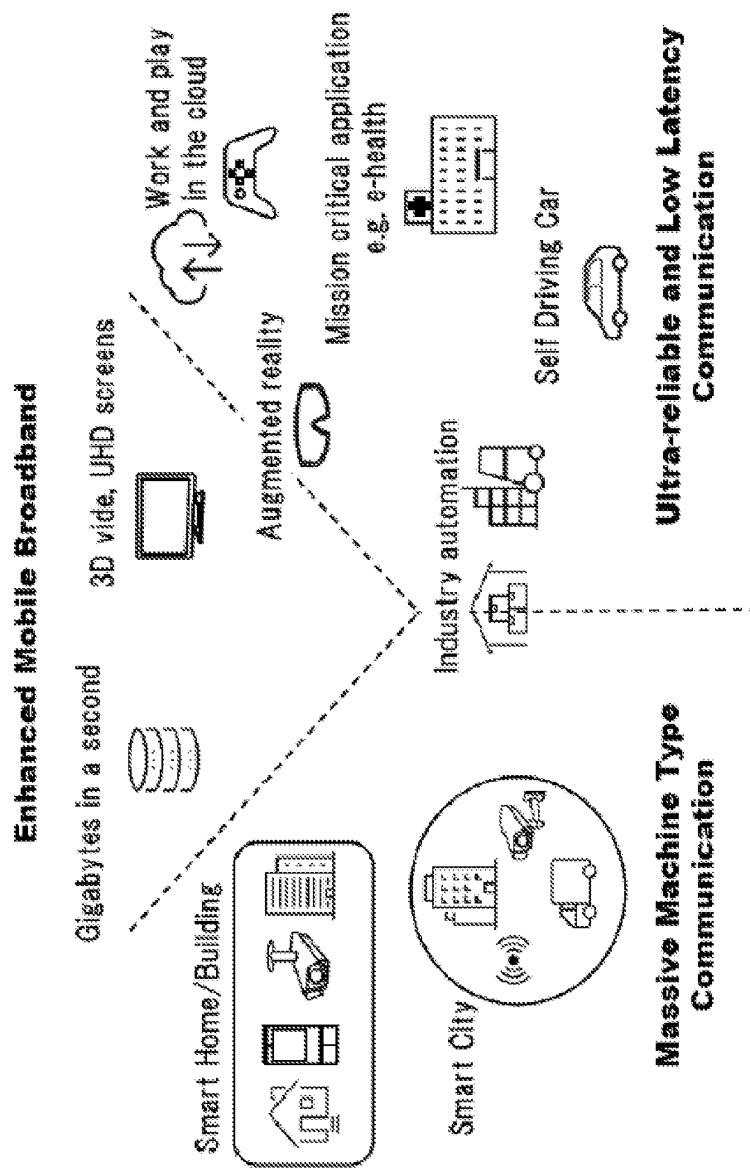


Fig. 4

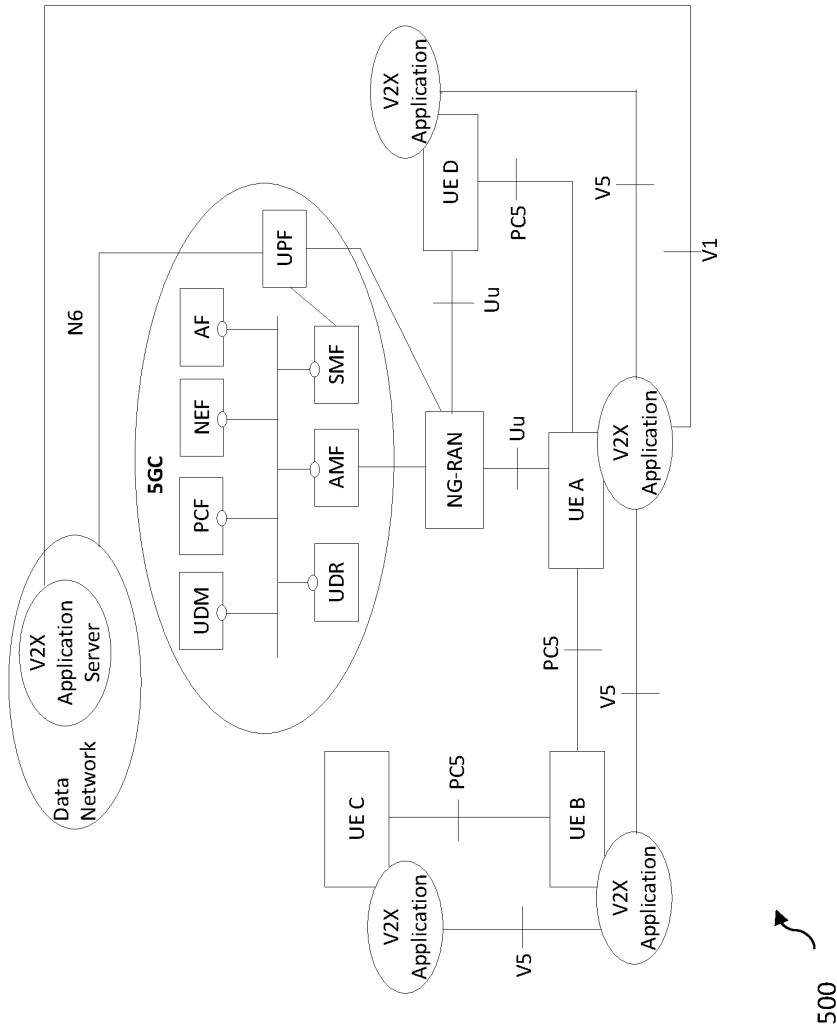


Fig. 5

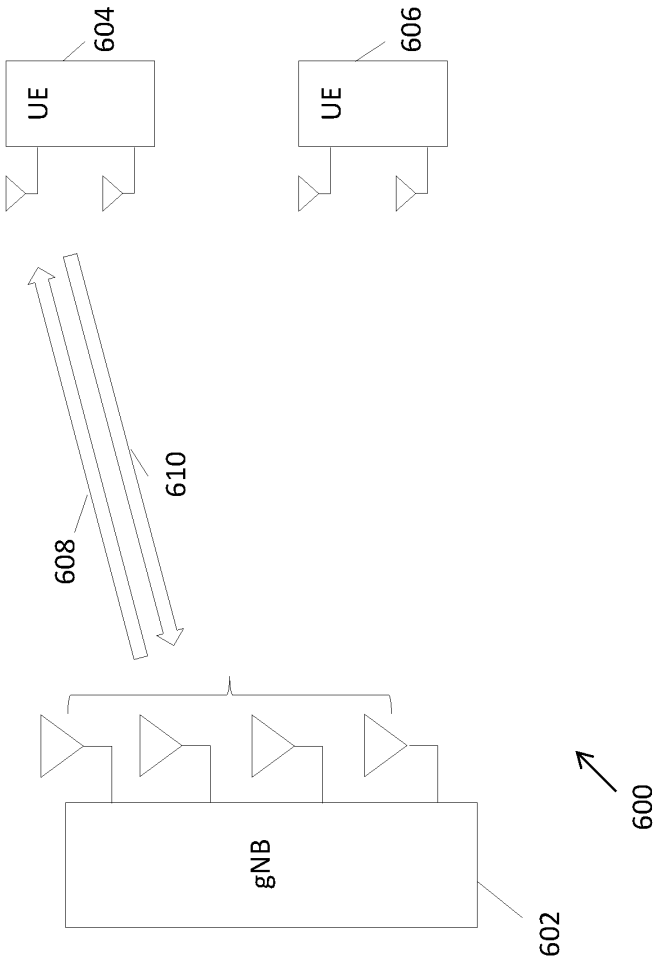


Fig. 6A

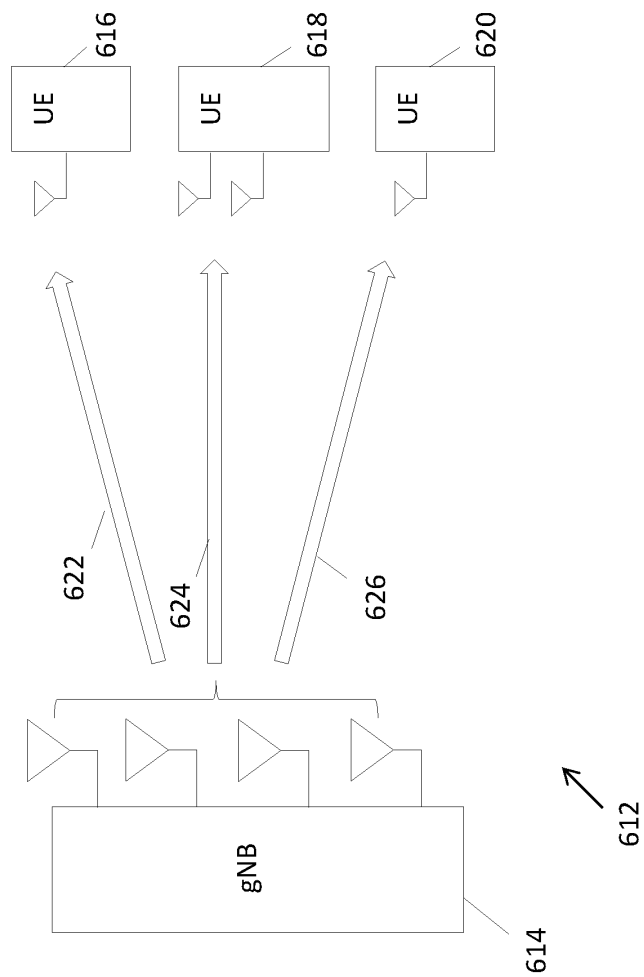


Fig. 6B

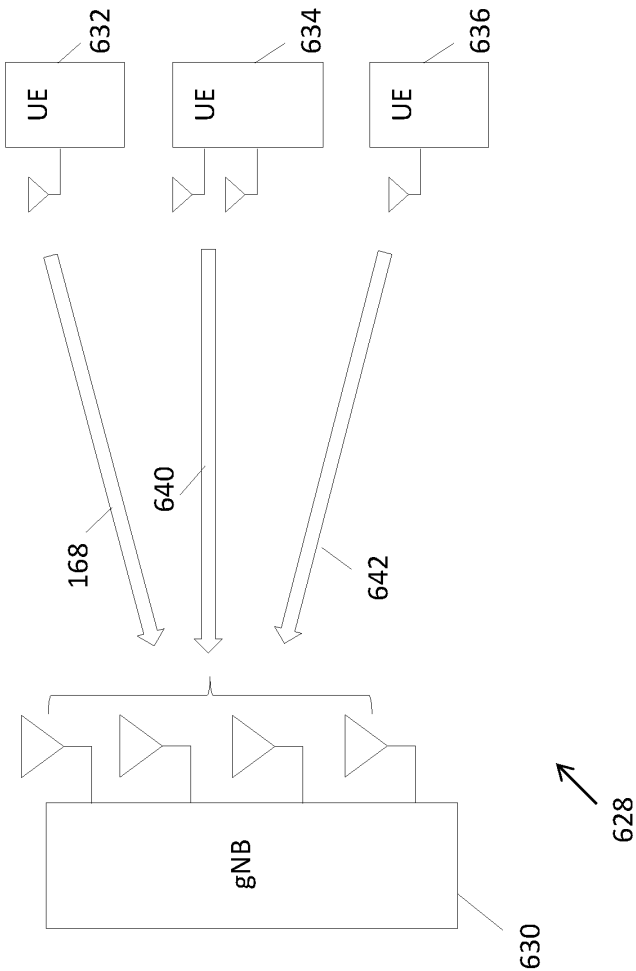


Fig. 6C

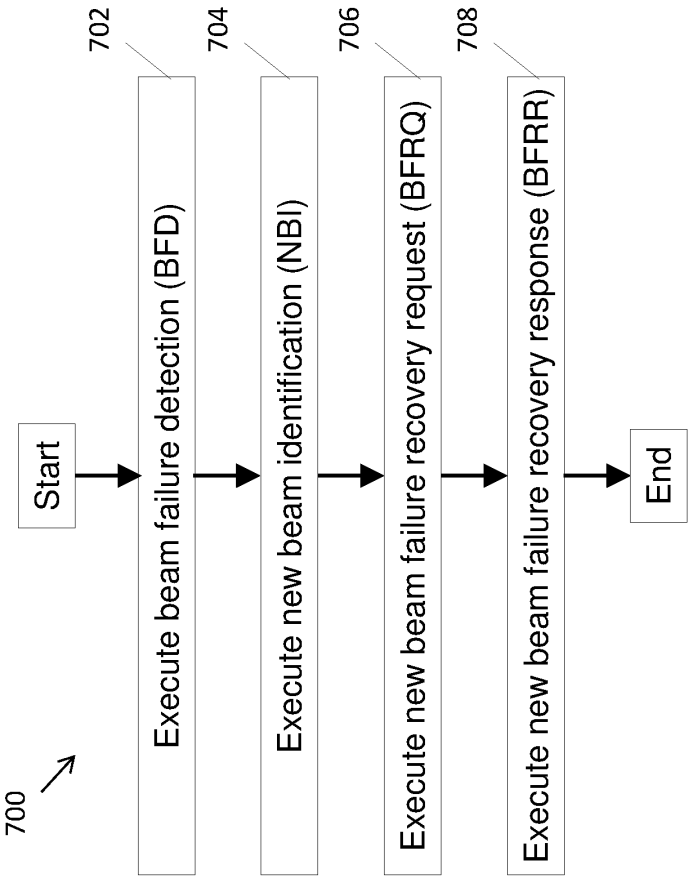


Fig. 7

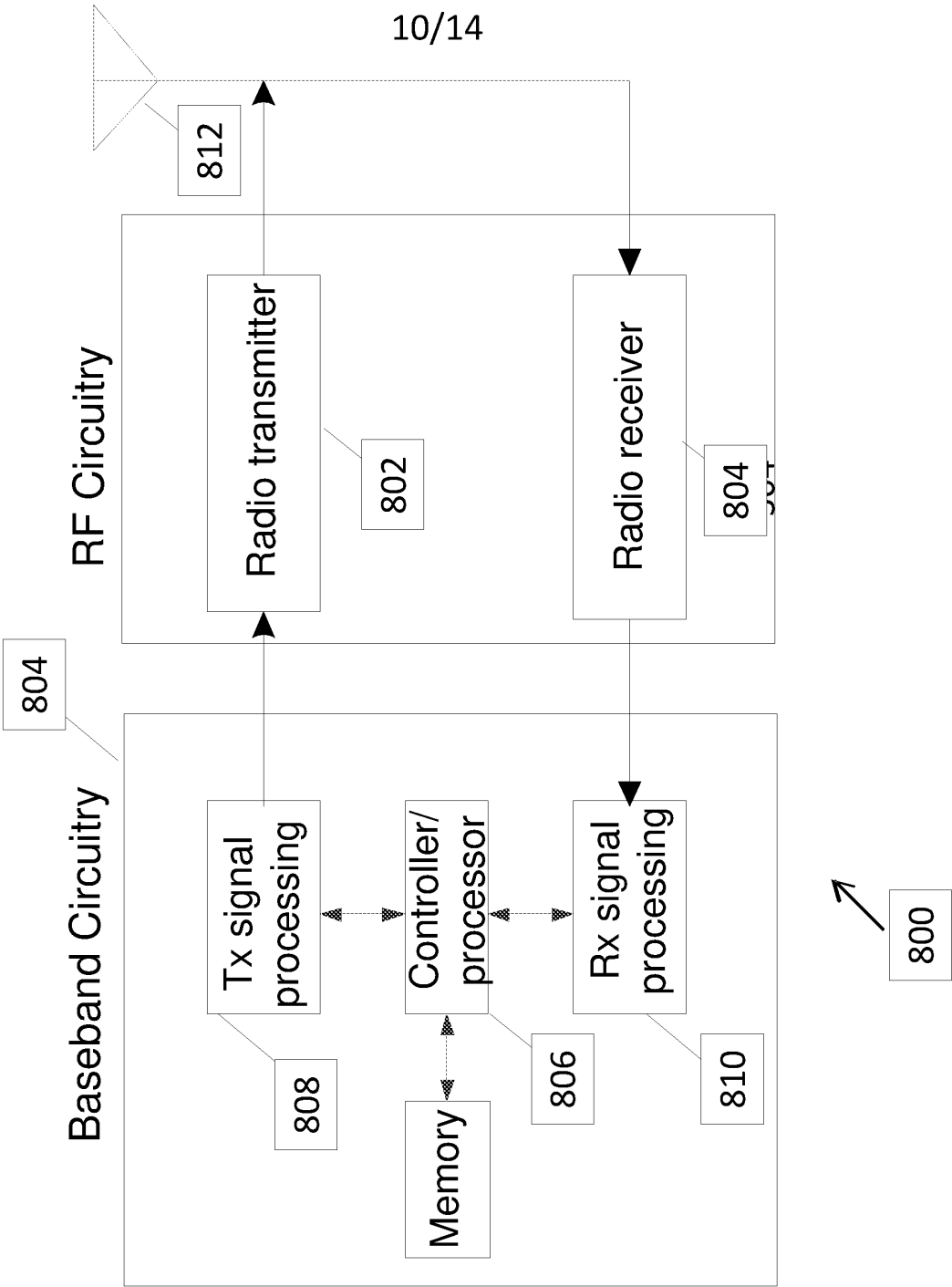


Fig. 8

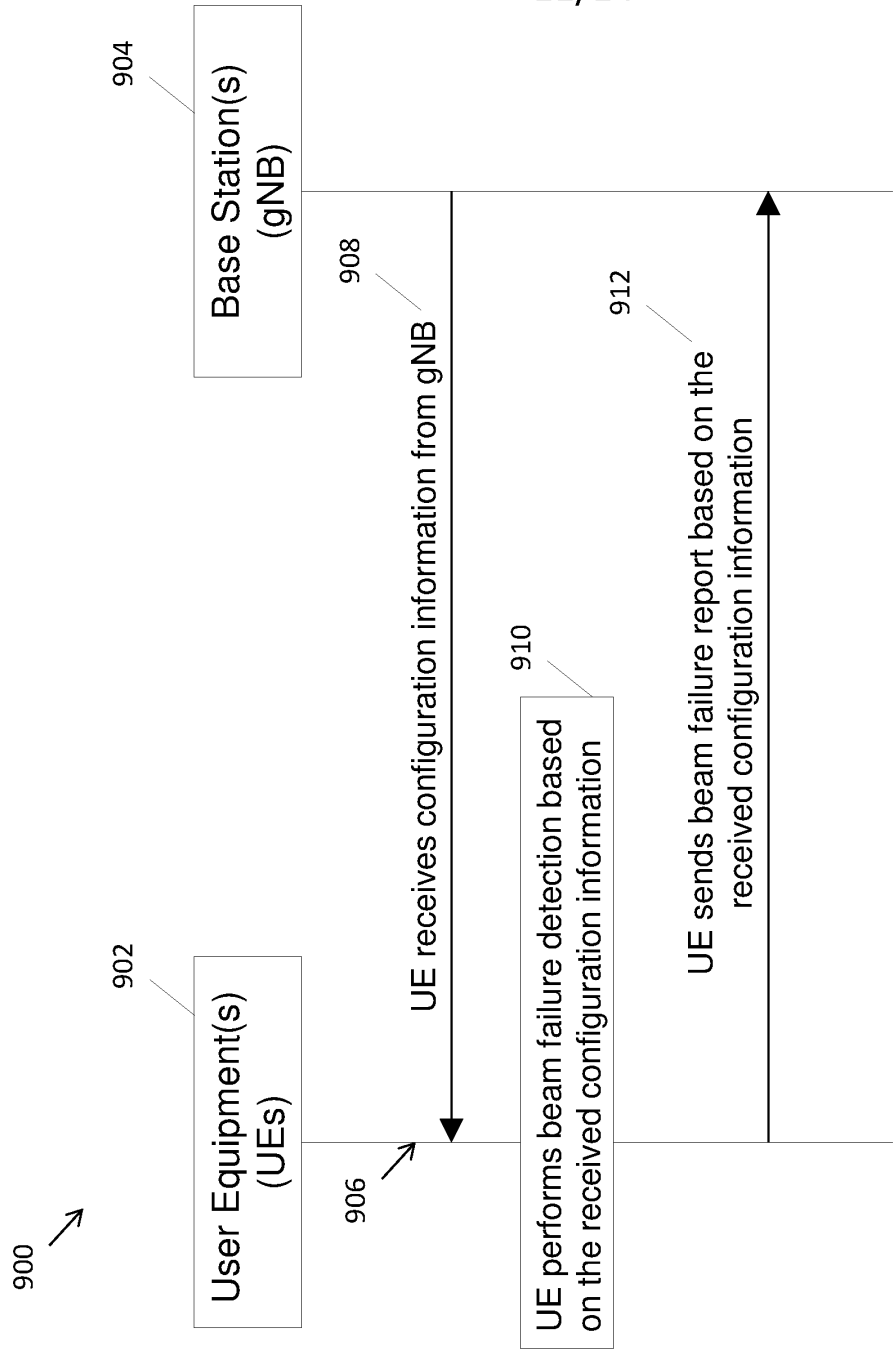


Fig. 9

SCellBFRConfigInfo ::= SEQUENCE {	CHOICE {	// SCell BFR configuration IE
Option	SEQUENCE { ... },	
SCell-basedBFRInfo		// Conventional BFR per SCell based on the BFR specified in Rel. 15
Group-basedSCellBFRInfo	Group-basedSCellBFRInfo-IE, // Indication of the configuration information of group-based SCell BFR	
}		
Group-basedSCellBFRInfo-IE ::= SEQUENCE (SIZE (1..maxGroupNr)) { OF SCellGroup		// The proposed group-based SCell BFR IE
BFRGroupList	SEQUENCE {	
GroupIndex	INTEGER (1..maxGroupNr),	// Group index
Cell_List	SEQUENCE (SIZE (1..maxNrofSCell)),	// List of CCs of each group
BFD	ENUMERATED { Opt. 1a, Opt. 1b, Opt. 2, Opt. 3a, Opt. 3b },	// Detect BF of the group based on 5 options
BFRreport	GroupIdentifier { Group ID, indicated CC, configuration index order },	// Indicate group identifier to be reported
MI	RSRP-Range	OPTIONAL, // Indicate to report RSRP of the failed group
Reason	ENUMERATED { initial, UE mobility, blockage, UE rotation }	OPTIONAL, // A known reason for BF event
BFRreportlink	ENUMERATED { PCell (PsCell) UL, SCell UL },	// Indicate link for BF report
Newbeam	NBInfo { CC index, spatial Rx, AoA }	OPTIONAL, // Provide new beam information
...	}	
}		
ENUMERATED { SCell-basedBFRInfo, Group-basedSCellBFRInfo, both },		

1000
↗

Fig. 10

Group information		Beam failure detection configuration information			Beam failure detection report configuration information		
Group index	Cell_List	BFD	BFRreport	MI	BFRreportLink	Reason	Newbeam
1	CC1, CC3, CC5	Opt. 1a	Group index	RSRP_02	PCell UL	Initial	No
2	PCell, CC2, CC6	Opt. 2	PCell	RSRP_05	PCell UL	UE mobility	No
3	CC7, CC8	Opt. 3b	CC7	RSRP_10	SCell UL	Blockage	No

↗
1100

Fig. 11

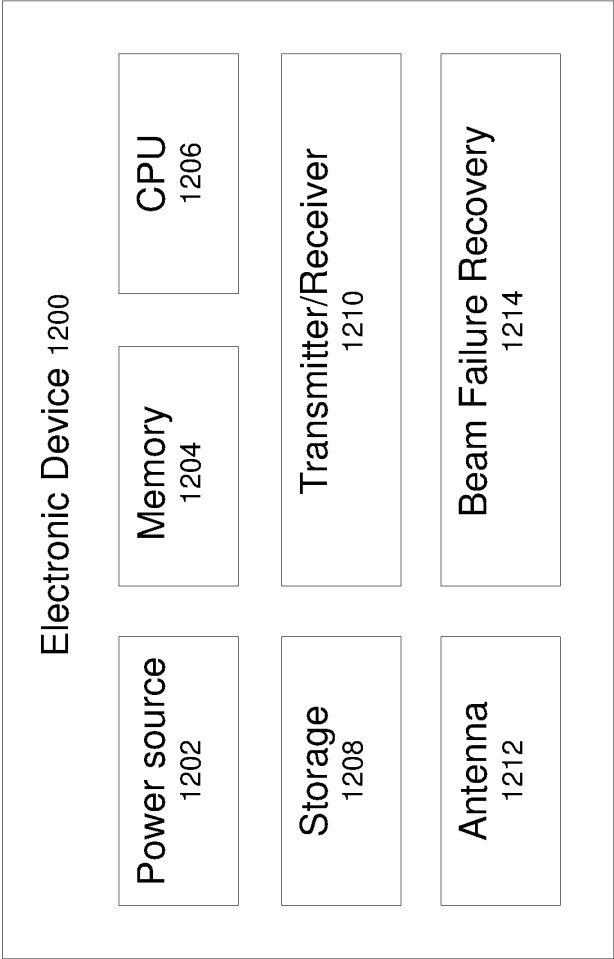


Fig. 12