

CLAIMS

Claim 1

A user equipment (26) comprising:

- receiving circuitry (42) configured to receive, from a base station apparatus (22), bitmap information used for determining at least one time domain position of at least one synchronization signal block, SSB, used for at least one of an intra-frequency and an inter-frequency measurement within a measurement window; and
- processing circuitry (40) configured to perform, based on the at least one SSB, the at least one of the intra-frequency and the inter-frequency measurement, wherein:
 - the at least one SSB comprises at least a primary synchronization signal, PSS, a secondary synchronization signal, SSS, and a physical broadcast channel, PBCH,
 - the user equipment being characterized in that:
 - the bitmap information is one of a plurality of bit sequences, a length of each of the plurality of bit sequences is different from each other, the length of each of the plurality of bit sequences is defined for each of three different frequency ranges including a first frequency range that is lower than 3 gigahertz, GHz, a second frequency range that is equal to or greater than 3 GHz and less than or equal to 6GHz, and a third frequency range that is higher than 6GHz, the length being less than 4 bits for the first frequency range, the length equal to 8 bits for the second frequency range, the length equal to 64 bits for the third frequency range.

Claim 2

A method in a user equipment (26) comprising:

- receiving, from a base station apparatus (22), bitmap information used for determining at least one time domain position of at least one synchronization signal block, SSB, used for at least one of an intra-frequency and an inter-frequency measurement within a measurement window; and
- performing, based on the at least one SSB, at least one of the intra-frequency and the inter-frequency measurement, wherein:
 - the at least one SSB comprises at least a primary synchronization signal, PSS, a secondary synchronization signal, SSS, and a physical broadcast channel, PBCH,
 - the method being characterized in that:
 - the bitmap information is one of a plurality of bit sequences, a length of each of the plurality of bit sequences is different from each other, the length of each of the plurality of bit sequences is defined for each of three different frequency ranges including a first frequency range that is lower than 3 gigahertz, GHz, a second frequency range that is equal to or greater than 3 GHz and less than or equal to 6GHz, and a third frequency range that is higher than 6GHz, the length being less than 4 bits for the first frequency range, the length equal to 8 bits for the second frequency range, the length equal to 64 bits for the third frequency range.

Claim 3

A base station apparatus (22), comprising:

generating circuitry (70) configured to generate bitmap information used for determining at least one time domain position of at least one synchronization signal block, SSB, used for at least one of an intra-frequency and an inter-frequency measurement within a measurement window; and

transmitting circuitry (32) configured to transmit, to a user equipment (26), the bitmap information, wherein

the at least one SSB comprises at least a primary synchronization signal, PSS, a secondary synchronization signal, SSS, and a physical broadcast channel, PBCH,

the base station being characterized in that:

the bitmap information is one of a plurality of bit sequences, a length of each of the plurality of bit sequences is different from each other, the length of each of the plurality of bit sequences is defined for each of three different frequency ranges including a first frequency range that is lower than 3 gigahertz, GHz, a second frequency range that is equal to or greater than 3 GHz and less than or equal to 6GHz, and a third frequency range that is higher than 6GHz, the length being less than 4 bits for the first frequency range, the length equal to 8 bits for the second frequency range, the length equal to 64 bits for the third frequency range.

Claim 4

A method of a base station apparatus (22), comprising:

generating bitmap information used for determining at least one time domain position of at least one synchronization signal block, SSB, used for at least one of an intra-frequency and an inter-frequency measurement within a measurement window, and

transmitting, to a user equipment (26), the bitmap information, wherein:

the at least one SSB comprises at least a primary synchronization signal, PSS, a secondary synchronization signal, SSS, and a physical broadcast channel, PBCH,

the method being characterized in that:

the bitmap information is one of a plurality of bit sequences, a length of each of the plurality of bit sequences is different from each other, the length of each of the plurality of bit sequences is defined for three different frequency ranges including a first frequency range that is lower than 3 gigahertz, GHz, a second frequency range that is equal to or greater than 3 GHz and less than or equal to 6GHz, and a third frequency range that is higher than 6GHz, the length being less than 4 bits for the first frequency range, the length equal to 8 bits for the second frequency range, the length equal to 64 bits for the third frequency range.