

WHAT IS CLAIMED IS:CLAIMS

- 1._____ A method of wireless communication performed by a user equipment, comprising:
- identifying that a band is associated with a first numerology and a second numerology for synchronization; and
- performing a synchronization scan to detect a synchronization signal block using stored data,
- wherein the stored data includes data regarding a plurality of frequency locations of the band,
- wherein frequency locations, of the plurality of frequency locations, are indicated by a synchronization raster of the band that identifies a spacing of the plurality of frequency locations for sending synchronization signal blocks,
- wherein the synchronization scan is performed with regard to a first set of frequency locations, of the plurality of frequency locations, associated with the first numerology, ~~and~~
- wherein the synchronization scan is performed with regard to the first set of frequency locations using a first pattern identified in the stored data,
- wherein the synchronization scan is performed with regard to a second set of frequency locations, of the plurality of frequency locations, associated with the second numerology, and

wherein the synchronization scan is performed with regard to the second set of frequency locations includes using a proper subset of frequency locations of the plurality of frequency locations.

2. The method of claim 1, wherein the first set of frequency locations does not overlap with the second ~~set of frequency locations.~~ pattern identified in the stored data.

~~3. The method of claim 1, wherein frequency locations of the first set of frequency locations alternate with frequency locations of the second set of frequency locations.~~

~~4. The method of claim 1, wherein the band is associated with a frequency, wherein the first set of frequency locations is associated with one of odd-number frequency offsets from the frequency or even-number frequency offsets from the frequency, and wherein the second set of frequency locations is associated with an opposite one of the odd-number frequency offsets or the even-number frequency offsets.~~

5.2. The method of claim 1, wherein the first numerology and the second numerology are of a plurality of numerologies associated with the band,
wherein the plurality of numerologies are associated with respective non-overlapping sets of frequency locations.

6.3. The method of claim 1, wherein the synchronization signal block contains at least one of a primary synchronization signal (PSS), a secondary synchronization signal (SSS), a tertiary synchronization signal (TSS), or a physical broadcast channel (PBCH).

~~7.4.~~ The method of claim 1, wherein the stored data identifies the plurality of frequency locations and indicates respective numerologies are associated with the plurality of frequency locations.

~~8. The method of claim 7, wherein the stored data identifies one numerology per frequency location.~~

~~9.5.~~ The method of claim 1, wherein the first set of frequency locations has a different quantity of frequency locations than the second set of frequency locations.

~~10. The method of claim 1, wherein frequency locations, of the plurality of frequency locations, are determined according to a synchronization raster that identifies a spacing of the plurality of frequency locations.~~

~~11. The method of claim 106.~~ The method of claim 1, wherein the user equipment is in a non-standalone mode; and

wherein frequency locations, of the plurality of frequency locations, are determined according to the synchronization raster in connection with an indication, received by the user equipment, indicating that the synchronization raster is to be used to determine the plurality of frequency locations in the non-standalone mode.

~~12.7.~~ The method of claim 1, wherein the first set of frequency locations is associated with a first spacing and the second set of frequency locations is associated with a second spacing different than the first spacing.

~~13.8.~~ The method of claim 1, wherein the first set of frequency locations includes all frequency locations of the plurality of frequency locations.

~~14. The method of claim 1, wherein the synchronization scan is performed with regard to the first set of frequency locations using a first pattern, and wherein the synchronization scan is performed with regard to the second set of frequency locations using a second pattern.~~

~~15. The method of claim 149.~~ The method of claim 1, wherein the first pattern corresponds to the first numerology and the second pattern corresponds to the second numerology.

~~16.10.~~ The method of claim 1, wherein the first numerology is associated with a first subcarrier spacing and the second numerology is associated with a second subcarrier spacing.

~~17.11.~~ The method of claim 1, wherein data regarding the stored data~~plurality of frequency locations of the band~~ is shared between the user equipment and a network to which the user equipment is connected.

12. The method of claim 1, wherein the second set of frequency locations includes every other frequency location of the first set of frequency locations.

~~18.13.~~ A user equipment (UE) for wireless communication, comprising:
a memory; and

one or more processors ~~operatively coupled to the memory, the memory and the one or more processors configured to:~~

identify that a band is associated with a first numerology and a second numerology for synchronization; and

perform a synchronization scan to detect a synchronization signal block using stored data,

wherein the stored data includes data regarding a plurality of frequency locations of the band,

wherein frequency locations, of the plurality of frequency locations, are indicated by a synchronization raster of the band that identifies a spacing of the plurality of frequency locations for sending synchronization signal blocks,

wherein the synchronization scan is performed with regard to a first set of frequency locations, of the plurality of frequency locations, associated with the first numerology, ~~and~~

wherein the synchronization scan is performed with regard to the first set of frequency locations using a first pattern identified in the stored data,

wherein the synchronization scan is performed with regard to a second set of frequency locations, of the plurality of frequency locations, associated with the second numerology, and

wherein the synchronization scan is performed with regard to the second set of frequency locations includes using a proper subset of frequency locations of the plurality of frequency locations~~second pattern identified in the stored data.~~

~~19.14.~~ The UE of claim ~~18,13~~, wherein the synchronization signal block contains at least one of a primary synchronization signal (PSS), a secondary synchronization signal (SSS), a tertiary synchronization signal (TSS), or a physical broadcast channel (PBCH).

~~20.15.~~ The UE of claim ~~18,13~~, wherein ~~the stored data identifies the plurality of frequency locations and indicates~~ respective numerologies are associated with the plurality of frequency locations.

~~21.16.~~ The UE of claim ~~18,13~~, wherein the first set of frequency locations has a different quantity of frequency locations than the second set of frequency locations.

~~22.17.~~ The UE of claim ~~18,13~~, wherein the first set of frequency locations is associated with a first spacing and the second set of frequency locations is associated with a second spacing different than the first spacing.

~~23.18.~~ The UE of claim ~~18,13~~, wherein the first set of frequency locations includes all frequency locations of the plurality of frequency locations.

~~24.19.~~ The UE of claim ~~18,13~~, wherein the ~~synchronization scan is performed with regard to~~ second set of frequency locations includes every other frequency location of the first set of frequency locations ~~using a first pattern, and,~~

20. The UE of claim 13, wherein the ~~synchronization scan is performed with regard~~
~~to~~ stored data is a table.

21. The UE of claim 13,
wherein the second set of frequency locations using first pattern is a first synchronization
signal block pattern, and
wherein the second pattern,— is a second synchronization signal block pattern.

22. The UE of claim 13,
wherein the first numerology is 120 kHz, and
wherein the second numerology is 240 kHz.

23. The UE of claim 13, wherein the first pattern and the second pattern are based on
the spacing.

25,24. A non-transitory computer-readable medium storing one or more instructions for
wireless communication, the one or more instructions comprising:

one or more instructions that, when executed by one or more processors of a user
equipment (UE), cause the one or more processors to:

identify that a band is associated with a first numerology and a second
numerology for synchronization; and

perform a synchronization scan to detect a synchronization signal block using
stored data,

wherein the stored data includes data regarding a plurality of frequency locations of the band,

wherein frequency locations, of the plurality of frequency locations, are indicated by a synchronization raster of the band that identifies a spacing of the plurality of frequency locations for sending synchronization signal blocks,

wherein the synchronization scan is performed with regard to a first set of frequency locations, of the plurality of frequency locations, associated with the first numerology, ~~and~~

wherein the synchronization scan is performed with regard to the first set of frequency locations using a first pattern identified in the stored data,

wherein the synchronization scan is performed with regard to a second set of frequency locations, of the plurality of frequency locations, associated with the second numerology, and

~~wherein~~ wherein the synchronization scan is performed with regard to the second set of frequency locations includes a proper subset of frequency locations of the plurality of frequency locations using a second pattern identified in the stored data.

~~26;~~25. The non-transitory computer-readable medium of claim ~~25;~~24, wherein the first set of frequency locations has a different quantity of frequency locations than the second set of frequency locations.

27.26. The non-transitory computer-readable medium of claim ~~25~~,24, wherein the first set of frequency locations is associated with a first spacing and the second set of frequency locations is associated with a second spacing different than the first spacing.

27. The non-transitory computer-readable medium of claim 24, wherein the second set of frequency locations includes every other frequency location of the first set of frequency locations.

28.____ An apparatus for wireless communication, comprising:
 means for identifying that a band is associated with a first numerology and a second numerology for synchronization; and
 means for performing a synchronization scan to detect a synchronization signal block using stored data,
 wherein the stored data includes data regarding a plurality of frequency locations of the band,
wherein frequency locations, of the plurality of frequency locations, are indicated by a synchronization raster of the band that identifies a spacing of the plurality of frequency locations for sending synchronization signal blocks,
 wherein the synchronization scan is performed with regard to a first set of frequency locations, of the plurality of frequency locations, associated with the first numerology,~~and~~
wherein the synchronization scan is performed with regard to the first set of frequency locations using a first pattern identified in the stored data,

wherein the synchronization scan is performed with regard to a second set of frequency locations, of the plurality of frequency locations, associated with the second numerology, and

wherein the synchronization scan is performed with regard to the second set of frequency locations includes using a proper subset of frequency locations of the plurality of frequency locations second pattern identified in the stored data.

29.____ The apparatus of claim 28, wherein the first set of frequency locations is associated with a first spacing and the second set of frequency locations is associated with a second spacing different than the first spacing.

30.____ The apparatus of claim 28, wherein the ~~synchronization scan is performed with regard to~~ second set of frequency locations includes every other frequency location of the first set of frequency locations using.

31. The apparatus of claim 28, wherein the first set of frequency locations is associated with a first pattern, spacing and wherein the synchronization scan is performed with regard to the second set of frequency locations using is associated with a second pattern, spacing different than the first spacing.