

CLAIMS

What is claimed is:

- 1 1. A method for wireless communication at a transmitting device,
2 comprising:
3 identifying location data associated with a physical location of the transmitting
4 device;
5 identifying a time-frequency resource within a slot, the time-frequency
6 resource corresponding to at least a portion of the location data associated with the physical
7 location of the transmitting device;
8 generating a sequence based at least in part on the portion of the location data,
9 or the slot, or the time-frequency resource, or a combination thereof;
10 encoding a signal using the sequence; and
11 transmitting the signal using the identified time-frequency resource to indicate
12 the physical location of the transmitting device.
- 1 2. The method of claim 1, further comprising:
2 determining that the physical location of the transmitting device lies within a
3 location area of a set of available location areas, wherein the sequence is based at least in part
4 on the location area.
- 1 3. The method of claim 2, wherein each location area within the set of
2 available location areas comprises a grid of geographic areas, each geographic area
3 corresponding to a time-frequency resource.
- 1 4. The method of claim 1, wherein the location data comprises
2 coordinates, comprises:
3 retrieving information identifying the coordinates from a global positioning
4 system of the transmitting device.
- 1 5. The method of claim 1, wherein the location data comprises
2 coordinates, comprising:
3 identifying the least significant bits (LSBs) of the coordinates, wherein the
4 portion of the location data comprises the LSBs.

1 6. A method for wireless communication at a receiving device,
2 comprising:
3 receiving a signal from a transmitting device over a time-frequency resource
4 within a slot;
5 attempting to decode the signal using a set of available sequences, each
6 sequence in the set of available sequences associated with the time-frequency resource and
7 the slot;
8 identifying a sequence from the set of available sequences based at least in
9 part on successfully decoding the signal using the sequence; and
10 determining a physical location of the transmitting device based at least in part
11 on the time-frequency resource, or the slot, or the sequence, or a combination thereof.

1 7. The method of claim 6, further comprising:
2 determining that the physical location of the transmitting device lies within a
3 location area of a set of available location areas, wherein the sequence is based at least in part
4 on the location area.

1 8. The method of claim 7, wherein each location area within the set of
2 available location areas comprises a grid of geographic areas, each geographic area
3 corresponding to a time-frequency resource.

1 9. The method of claim 6, wherein determining the physical location of
2 the transmitting device comprises:
3 identifying, based at least in part on the sequence, at least a portion of
4 coordinates associated with the physical location of the transmitting device.

1 10. The method of claim 9, further comprising:
2 identifying least significant bits (LSBs) of the coordinates based at least in part
3 on the time-frequency resource, wherein the portion of the coordinates comprises the LSBs of
4 the coordinates.

1 11. An apparatus for wireless communication at a transmitting device,
2 comprising:
3 a processor,

4 memory coupled with the processor; and
5 instructions stored in the memory and executable by the processor to cause the
6 apparatus to:
7 identify location data associated with a physical location of the
8 transmitting device;
9 identify a time-frequency resource within a slot, the time-frequency
10 resource corresponding to at least a portion of the location data associated with the
11 physical location of the transmitting device;
12 generate a sequence based at least in part on the portion of the location
13 data, or the slot, or the time-frequency resource, or a combination thereof;
14 encode a signal using the sequence; and
15 transmit the signal using the identified time-frequency resource to
16 indicate the physical location of the transmitting device.

1 12. The apparatus of claim 11, wherein the instructions are further
2 executable by the processor to cause the apparatus to:
3 determine that the physical location of the transmitting device lies within a
4 location area of a set of available location areas, wherein the sequence is based at least in part
5 on the location area.

1 13. The apparatus of claim 12, wherein each location area within the set of
2 available location areas comprises a grid of geographic areas, each geographic area
3 corresponding to a time-frequency resource.

1 14. The apparatus of claim 11, wherein the location data comprises
2 coordinates, comprises:
3 retrieve information identifying the coordinates from a global positioning
4 system of the transmitting device.

1 15. The apparatus of claim 11, wherein the location data comprises
2 coordinates, and the instructions are further executable by the processor to cause the
3 apparatus to:
4 identify the least significant bits (LSBs) of the coordinates, wherein the
5 portion of the location data comprises the LSBs.

1 16. An apparatus for wireless communication at a receiving device,
2 comprising:
3 a processor,
4 memory coupled with the processor; and
5 instructions stored in the memory and executable by the processor to cause the
6 apparatus to:
7 receive a signal from a transmitting device over a time-frequency
8 resource within a slot;
9 attempt to decode the signal using a set of available sequences, each
10 sequence in the set of available sequences associated with the time-frequency
11 resource and the slot;
12 identify a sequence from the set of available sequences based at least in
13 part on successfully decoding the signal using the sequence; and
14 determine a physical location of the transmitting device based at least
15 in part on the time-frequency resource, or the slot, or the sequence, or a combination
16 thereof.

1 17. The apparatus of claim 16, wherein the instructions are further
2 executable by the processor to cause the apparatus to:
3 determine that the physical location of the transmitting device lies within a
4 location area of a set of available location areas, wherein the sequence is based at least in part
5 on the location area.

1 18. The apparatus of claim 17, wherein each location area within the set of
2 available location areas comprises a grid of geographic areas, each geographic area
3 corresponding to a time-frequency resource.

1 19. The apparatus of claim 16, wherein the instructions to determine the
2 physical location of the transmitting device are executable by the processor to cause the
3 apparatus to:
4 identify, based at least in part on the sequence, at least a portion of coordinates
5 associated with the physical location of the transmitting device.

1 20. The apparatus of claim 19, wherein the instructions are further
2 executable by the processor to cause the apparatus to:
3 identify least significant bits (LSBs) of the coordinates based at least in part on
4 the time-frequency resource, wherein the portion of the coordinates comprises the LSBs of
5 the coordinates.

1 21. An apparatus for wireless communication at a transmitting device,
2 comprising:
3 means for identifying location data associated with a physical location of the
4 transmitting device;
5 means for identifying a time-frequency resource within a slot, the time-
6 frequency resource corresponding to at least a portion of the location data associated with the
7 physical location of the transmitting device;
8 means for generating a sequence based at least in part on the portion of the
9 location data, or the slot, or the time-frequency resource, or a combination thereof;
10 means for encoding a signal using the sequence; and
11 means for transmitting the signal using the identified time-frequency resource
12 to indicate the physical location of the transmitting device.

1 22. The apparatus of claim 21, further comprising:
2 means for determining that the physical location of the transmitting device lies
3 within a location area of a set of available location areas, wherein the sequence is based at
4 least in part on the location area.

1 23. The apparatus of claim 22, wherein each location area within the set of
2 available location areas comprises a grid of geographic areas, each geographic area
3 corresponding to a time-frequency resource.

1 24. The apparatus of claim 21, wherein the location data comprises
2 coordinates, comprises:
3 means for retrieving information identifying the coordinates from a global
4 positioning system of the transmitting device.

1 25. The apparatus of claim 21, wherein the location data comprises
2 coordinates, the apparatus further comprising:

3 means for identifying the least significant bits (LSBs) of the coordinates,
4 wherein the portion of the location data comprises the LSBs.

1 26. An apparatus for wireless communication at a receiving device,
2 comprising:

3 means for receiving a signal from a transmitting device over a time-frequency
4 resource within a slot;

5 means for attempting to decode the signal using a set of available sequences,
6 each sequence in the set of available sequences associated with the time-frequency resource
7 and the slot;

8 means for identifying a sequence from the set of available sequences based at
9 least in part on successfully decoding the signal using the sequence; and

10 means for determining a physical location of the transmitting device based at
11 least in part on the time-frequency resource, or the slot, or the sequence, or a combination
12 thereof.

1 27. The apparatus of claim 26, further comprising:

2 means for determining that the physical location of the transmitting device lies
3 within a location area of a set of available location areas, wherein the sequence is based at
4 least in part on the location area.

1 28. The apparatus of claim 27, wherein each location area within the set of
2 available location areas comprises a grid of geographic areas, each geographic area
3 corresponding to a time-frequency resource.

1 29. The apparatus of claim 26, wherein the means for determining the
2 physical location of the transmitting device comprises:

3 means for identifying, based at least in part on the sequence, at least a portion
4 of coordinates associated with the physical location of the transmitting device.

1 30. The apparatus of claim 29, further comprising:

2 means for identifying least significant bits (LSBs) of the coordinates based at
3 least in part on the time-frequency resource, wherein the portion of the coordinates comprises
4 the LSBs of the coordinates.

1 31. A non-transitory computer-readable medium storing code for wireless
2 communication at a transmitting device, the code comprising instructions executable by a
3 processor to:
4 identify location data associated with a physical location of the transmitting
5 device;
6 identify a time-frequency resource within a slot, the time-frequency resource
7 corresponding to at least a portion of the location data associated with the physical location of
8 the transmitting device;
9 generate a sequence based at least in part on the portion of the location data, or
10 the slot, or the time-frequency resource, or a combination thereof;
11 encode a signal using the sequence; and
12 transmit the signal using the identified time-frequency resource to indicate the
13 physical location of the transmitting device.

1 32. A non-transitory computer-readable medium storing code for wireless
2 communication at a receiving device, the code comprising instructions executable by a
3 processor to:
4 receive a signal from a transmitting device over a time-frequency resource
5 within a slot;
6 attempt to decode the signal using a set of available sequences, each sequence
7 in the set of available sequences associated with the time-frequency resource and the slot;
8 identify a sequence from the set of available sequences based at least in part
9 on successfully decoding the signal using the sequence; and
10 determine a physical location of the transmitting device based at least in part
11 on the time-frequency resource, or the slot, or the sequence, or a combination thereof.