CLAIMS

~~**WHAT IS CLAIMED IS:**~~

1. ~~——~~A method of wireless communication at a user equipment (UE), comprising:

determining ~~at least one UE capability; and~~

~~signaling~~ UE capability information ~~to a base station, including:~~

~~signaling~~comprising Radio Frequency (RF) capability information ~~to the base station with reference to at least one band combination; and~~

~~signaling at least one other~~and baseband ~~parameter to the base station, wherein the RF~~ capability information, the baseband capability information comprising at least one other baseband parameter that indicates a numerology, the RF capability information indicating RF capability with reference to at least one band combination, wherein the RF capability information comprises an index of the at least one other baseband parameter that indicates whether the numerology is supported for a particular RF band within the at least one band combination; and signaling the UE capability information to a base station.

2. ~~——~~ The method of claim 1, wherein the at least one other baseband parameter is indicated per band.

3. ~~——~~ The method of claim 2, wherein support for a baseband parameter of the at least one other baseband parameter is indicated using an Identifier (ID).

4. ~~——~~ The method of claim 1, wherein support for ~~the~~a baseband parameter of the at least one other baseband parameter is indicated per component carrier (CC).

5. ~~——~~ The method of claim 4, wherein the support for the baseband parameter of the at least one other baseband parameter for a CC is indicated using an Identifier (ID).

6. ~~——~~ The method of claim ~~1~~4, wherein the support for ~~a~~the baseband parameter of the at least one other baseband parameter is indicated per band, and per CC.

7.——The method of claim 1, wherein the RF capability information indicates support for a baseband parameter of the at least one other baseband parameter with reference to a corresponding identifier (ID) ~~for~~of the ~~other~~ baseband parameter.

8.——The method of claim 7, wherein ~~each other~~the baseband parameter indicates support of band parameters with reference to the corresponding ID.

9.——The method of claim 8, wherein ~~each other~~the baseband parameter indicates support for Component Carrier (CC) parameters with reference to the corresponding ID.

10.——The method of claim 1, wherein the at least one other baseband parameter is comprised in a list of capabilities supported by the UE.

11.——The method of claim 10, wherein each ~~set~~capability in the list of capabilities ~~supported by the UE~~ has a corresponding other baseband parameter identifier (ID).

12.——The method of claim 1, wherein ~~each defined~~the at least one band combination comprises a bandwidth combination set identifier, wherein the RF capability information indicates ~~the~~an RF capability for one of a ~~defined~~ plurality of basebands with reference to the bandwidth combination set identifier.

13.——The method of claim 1, wherein the at least one other baseband parameter is common across multiple RF bands.

14.——The method of claim 1, wherein ~~each~~ the at least one band combination indicates a combination comprising the numerology and at least one of a ~~numerology, a~~ layer~~,~~ or a bandwidth.

15.——The method of claim 14, wherein the RF capability information indicates whether the numerology, the layer, and the bandwidth is supported for a particular band combination.

16.——The method of claim 1, wherein the UE capability information is signaled without an indication of a bandwidth class.

17. The method of claim 1, wherein the at least one band combination defines a plurality of band combinations ~~are defined each~~, wherein the at least one band combination ~~comprising~~comprises the numerology and at least one of a ~~numerology, a~~ layer and a bandwidth class~~,~~

~~wherein the RF capability information indicates RF capability for one of the defined~~ of a plurality of bandwidth classes~~.~~, and wherein the RF capability information indicates an RF capability for one of the plurality of bandwidth classes.

18. An apparatus for wireless communication at a user equipment (UE), comprising:

means for determining ~~at least one UE capability; and~~

~~means for signaling~~ UE capability information ~~to a base station, wherein the means for signaling is configured to:~~

~~signal~~comprising Radio Frequency (RF) capability information ~~to the base station with reference to at least one band combination; and~~

~~signal~~and baseband capability information, the baseband capability information comprising at least one other baseband parameter ~~to the base station, wherein the RF capability information~~ that indicates a numerology, the RF capability information indicating RF capability with reference to at least one band combination, wherein the RF capability information comprises an index of the at least one other baseband parameter that indicates whether the numerology is supported for a particular RF band within the at least one band combination; and means for signaling the UE capability information to a base station.

19. The apparatus of claim 18, wherein support for a baseband parameter of the at least one other baseband parameter is indicated per band using an Identifier (ID).

20. The apparatus of claim 18, wherein ~~the~~ support for ~~the~~a baseband parameter of the at least one other baseband parameter is indicated per component carrier (CC) and using an Identifier (ID).

21. The apparatus of claim ~~18~~20, wherein the support for the baseband parameter of the at least one other baseband parameter is indicated per band, and per CC.

22.—— The apparatus of claim 18, wherein the RF capability information indicates ~~the~~ support for ~~the~~a baseband parameter of the at least one other baseband parameter with reference to a corresponding identifier (ID) ~~for~~of the at least one other baseband parameter.

23.—— The apparatus of claim 22, wherein the support for Component Carrier (CC) parameters is indicated with reference to the corresponding ID.

24.—— The apparatus of claim 18, wherein the at least one other baseband parameter is comprised in a list of capabilities supported by the UE, wherein each ~~set~~capability in the list of capabilities ~~supported by the UE~~ has a corresponding other baseband parameter identifier (ID).

25.—— The apparatus of claim 18, wherein ~~each defined~~the at least one band combination comprises a bandwidth combination set identifier, wherein the RF capability information indicates ~~the~~an RF capability for one of a ~~defined~~ plurality of basebands with reference to the bandwidth combination set identifier.

26.—— The apparatus of claim 18, wherein the at least one other baseband parameter is common across multiple RF bands.

27.—— The apparatus of claim 26, wherein ~~each~~ the at least one band combination indicates a combination comprising the numerology and at least one of a ~~numerology, a~~ layer~~,~~ or a bandwidth.

28.—— The apparatus of claim 27, wherein the RF capability information indicates whether the numerology, the layer, and the bandwidth is supported for a particular band combination.

29.—— The apparatus of claim 18, wherein the UE capability information is signaled without an indication of a bandwidth class.

30.—— The apparatus of claim 18, wherein the at least one band combination defines a plurality of band combinations ~~are defined each band combination comprising at least one of a numerology, a layer and a bandwidth class, and~~

, wherein the ~~RF capability information indicates RF capability for one of the defined~~at least one band combination comprises the numerology and at least one of a layer and a bandwidth class of a plurality of bandwidth classes~~.~~, and wherein the RF capability information indicates an RF capability for one of the plurality of bandwidth classes.

31. ~~—~~An apparatus for wireless communication at a user equipment (UE), comprising:

a memory; and

at least one processor coupled to the memory and configured to:

determine ~~at least one UE capability; and~~

~~signal~~ UE capability information ~~to a base station, including~~

~~signaling~~comprising Radio Frequency (RF) capability information ~~to the base station with reference to at least one band combination; and~~

~~signaling~~and baseband capability information, the baseband capability information comprising at least one other baseband parameter ~~to the base station, wherein~~that indicates a numerology, the RF capability information ~~indicates~~indicating RF capability with reference to at least one band combination, wherein the RF capability information comprises an index of the at least one other baseband parameter that indicates whether the numerology is supported for a particular RF band within the at least one band combination, and signal UE capability information to a base station.

32.~~—~~ The apparatus of claim 31, wherein support for a baseband parameter of the at least one other baseband parameter is indicated per band ~~and~~ using an Identifier (ID).

33.~~—~~ The apparatus of claim 31, wherein support for the at least one other baseband parameter is indicated per component carrier (CC) ~~and~~ using an Identifier (ID).

34.~~—~~ The apparatus of claim ~~31~~33, wherein support for the at least one other baseband parameter is indicated per band, and per CC.

35.~~—~~ The apparatus of claim 31, wherein the RF capability information indicates support for a baseband parameter of the at least one other baseband parameter with reference to a corresponding identifier (ID) ~~for~~of the at least one other baseband parameter.

36.~~—~~ The apparatus of claim 35, wherein the at least one other baseband parameter indicates the support for Component Carrier (CC) parameters with reference to the corresponding ID.

37.—— The apparatus of claim 31, wherein the at least one other baseband parameter is comprised in a list of capabilities supported by the UE, wherein each ~~set~~capability in the list of capabilities ~~supported by the UE~~ has a corresponding other baseband parameter identifier (ID).

38.—— The apparatus of claim 31, wherein ~~each defined~~the at least one band combination comprises a bandwidth combination set identifier, wherein the RF capability information indicates ~~the~~an RF capability for one of a ~~defined~~ plurality of basebands with reference to the bandwidth combination set identifier.

39.—— The apparatus of claim 31, wherein the at least one other baseband parameter is common across multiple RF bands.

40.—— The apparatus of claim 39, wherein ~~each~~ the at least one band combination indicates a combination comprising the numerology and at least one of a ~~numerology, a~~ layer~~,~~ or a bandwidth.

41.—— The apparatus of claim 40, wherein the RF capability information indicates whether the numerology, the layer, and the bandwidth is supported for a particular band combination.

42.—— The apparatus of claim 31, wherein the UE capability information is signaled without an indication of a bandwidth class.

43.—— The apparatus of claim 31, wherein the at least one band combination defines a plurality of band combinations ~~are defined each~~, wherein the at least one band combination ~~comprising~~comprises the numerology and at least one of a ~~numerology, a~~ layer and a bandwidth class~~, and~~

of a plurality of bandwidth classes, and wherein the RF capability information indicates an RF capability for one of the ~~defined~~ plurality of bandwidth classes.

44.—— A non-transitory computer-readable medium storing computer executable code for wireless communication at a user equipment (UE), the code when executed by a processor cause the processor to:

determine ~~at least one UE capability; and~~

~~signal~~ UE capability information ~~to a base station, including~~

~~signaling~~comprising Radio Frequency (RF) capability information ~~to~~and baseband capability information, the ~~base station with reference to at least one band combination; and~~

~~signaling~~baseband capability information comprising at least one other baseband parameter ~~to the base station, wherein the RF capability information~~ that indicates a numerology, the RF capability information indicating RF capability with reference to at least one band combination, wherein the RF capability information comprises an index of the at least one other baseband parameter~~.~~

that indicates whether the numerology is supported for a particular RF band within the at least one band combination, and signal UE capability information to a base station.