

CLAIMS

What is claimed is:

1. A method for wireless communication at a user equipment-~~(UE (115))~~, comprising:
 - receiving a first synchronization signal block-~~(SSB)~~₁ in a radio frequency band of a first cell of a first base station;
 - reporting a physical cell identifier-~~(PCI)~~₁ for the first cell to a second base station based at least in part on the received first SSB;
 - receiving, from the second base station in response to the reported PCI, an instruction to report a global cell identifier-~~(CGI)~~₁ for the first base station; and
 - transmitting the CGI to the second base station based at least in part on the received instruction and whether the radio frequency band of the first SSB was received in a synchronization raster.
2. The method of claim 1, further comprising:
 - determining, by the UE, that the first SSB was received in the synchronization raster;
- ~~3. The method of claim 2, further comprising:~~
 - receiving, from the first base station, system information associated with the first SSB;
 - identifying the CGI based at least in part on the system information; and
 - transmitting the CGI to the second base station.
- ~~4.~~ 3. The method of claim ~~2~~₁, further comprising:
 - determining, by the UE, that the first SSB was received in the synchronization raster;
 - determining that system information is not associated with the first SSB;
 - receiving, from the first base station, a second SSB wherein the second SSB is indicated at least in part by the first SSB;
 - receiving, from the first base station, system information associated with the second SSB, wherein the second SSB is received based at least in part on the received first SSB;

identifying the CGI based at least in part on the system information; and
transmitting the CGI to the second base station.

~~54.~~ The method of claim 1, further comprising:
determining, by the UE, that the first SSB was received off the
synchronization raster;

~~6.~~ ~~The method of claim 5, further comprising:~~
determining system information is not associated with the first SSB;
receiving an indication to determine system information associated with a
second cell of the first base station;
identifying the CGI based at least in part on the system information; and
transmitting the CGI to the second base station;

~~7.~~ ~~The method of claim 6, wherein the second cell comprises a master~~
long term evolution (LTE), evolved NodeB (eNB), of the first base station operating in a
non-standalone mode.

~~85.~~ The method of claim ~~5,1~~, further comprising:
determining, by the UE, that the first SSB was received off the
synchronization raster;
determining a timing reference associated with a broadcast CGI based at least
in part on the received first SSB;
receiving, from the first base station, a broadcast CGI based at least in part on
a transmission pattern associated with the timing reference;
identifying the CGI based at least in part on the broadcast CGI; and
transmitting the CGI to the second base station;

~~9.~~ ~~The method of claim 8,~~ wherein parameters of the transmission pattern
comprise a transmission periodicity and an offset;

~~10.~~ ~~The method of claim 8,~~ or wherein parameters of the transmission
pattern are obtained from system information.

~~116.~~ The method of claim ~~5,1~~, further comprising:
determining, by the UE, that the first SSB was received off the
synchronization raster;

determining a timing reference associated with dedicated resources for CGI at least in part based on the received first SSB;

transmitting a CGI request in the dedicated resources based at least in part on a transmission pattern associated with the timing reference;

receiving the CGI based at least in part on the transmitted CGI request; and

transmitting the CGI to the second base station.

12. ~~The method of claim 11,~~ wherein parameters of a transmission pattern of the dedicated resources for CGI comprise a transmission periodicity and an offset.

13. ~~The method of claim 11,~~ or wherein parameters of a transmission pattern of the dedicated resources for CGI are obtained from system information, or wherein the CGI request is transmitted in a request of a random access procedure and the CGI is received in a response of the random access procedure.

14. ~~The method of claim 11, wherein:~~

~~the CGI request is transmitted in a request of a random access procedure; and the CGI is received in a response of the random access procedure.~~

15. ~~The method of claim 1,~~ wherein the instruction to report the CGI is transmitted by the second base station based at least in part on a determination, by the second base station, that the first SSB was received in the synchronization raster.

16. The method of ~~any one of claims~~ claim 1 to 15, wherein reporting the PCI comprises:

transmitting a measurement report that includes the PCI for the first cell and a measurement identifier associated with receiving the first SSB, wherein the instruction to report the CGI is based at least in part on the PCI and the measurement identifier.

17. The method of ~~any one of claims~~ claim 1 to 16, further comprising:

receiving a first portion of the CGI in a first broadcast CGI message;

receiving a second portion of the CGI in a second broadcast CGI message; and

identifying the CGI based at least in part on the first portion and the second portion.

18. The method of ~~any one of claims~~ claim 1 to 16, further comprising:

identifying a CGI broadcast pattern based at least in part one or more SSBs of a plurality of SSBs; and
 receiving the CGI based at least in part on the identified CGI broadcast pattern.

~~19~~11. The method of ~~any one of claims~~ claim 1 to 18, wherein:
 the first base station comprises a neighboring base station; and
 the second base station comprises a serving base station.

~~20~~12. A method for wireless communication at a first base station, ~~(105-a)~~, comprising:
 receiving, from a user equipment (~~UE~~), a physical cell identifier (~~PCI~~), for a first cell of a second base station;
 identifying whether a radio frequency band of a first synchronization signal block (~~SSB~~), used to identify the PCI was received in a synchronization raster; and
 determining whether to instruct the UE to report a global cell identifier (~~CGI~~), for the second base station based at least in part on the identification.

~~23~~13. The method of claim ~~20, 12~~, further comprising:
 transmitting an instruction for the UE to report the CGI based at least in part on a determination that the first SSB was received in the synchronization raster; and
 receiving the CGI from the UE based at least in part on the instruction.

~~22~~14. The method of claim ~~20, 12~~, further comprising:
 refraining from instructing the UE to report the CGI based at least in part on a determination that the first SSB was received off the synchronization raster.

~~23~~15. The method of claim ~~20, 12~~, further comprising:
 transmitting an instruction for the UE to report the CGI based at least in part on a determination that the first SSB was received off the synchronization raster; and
 receiving the CGI from the UE based at least in part on the transmitted instruction.

~~24~~16. The method of claim ~~20, 12~~, further comprising:

transmitting an instruction for the UE to obtain system information from a second cell of the second base station to identify the CGI; and

receiving the CGI from the UE in response to the transmitted instruction;

~~25. The method of claim 24, wherein the second cell comprises a master long term evolution (LTE) evolved NodeB (eNB) of the first base station operating in a non-standalone mode.~~

~~26~~17. The method of ~~any one of claims 20 to 25~~claim 12, further comprising:

transmitting a CGI reporting configuration to the UE; and

receiving, from the UE, the CGI in a CGI report configured based at least in part on the transmitted CGI reporting configuration;

~~27. The method of any one of claims 20 to 25, further comprising:~~

or:

transmitting a CGI reporting configuration to the UE that indicates that the UE is to measure and report cell level measurements;

~~28. The method of any one of claims 20 to 25, further comprising:~~

or:

transmitting a CGI reporting configuration to the UE that indicates that the UE is to measure and report beam level measurements, wherein the beam level measurements comprise a beam identifier, or wherein the beam level measurements comprise a beam quality, or wherein the beam level measurements comprise a beam identifier and beam quality.

~~29. The method of claim 28, wherein the beam level measurements comprise a beam identifier.~~

~~30. The method of claim 28, wherein the beam level measurements comprise a beam quality.~~

~~31. The method of claim 28, wherein the beam level measurements comprise a beam identifier and beam quality.~~

~~32~~18. An apparatus for wireless communication at a user equipment (UE), comprising:

~~a processor;~~
~~memory in electronic communication with the processor; and~~
~~instructions stored in the memory and executable by the processor to cause the~~
~~apparatus to:~~

~~receive~~means for receiving (810, 820) a first synchronization signal block ~~(~~₁~~)~~
SSB₁ in a radio frequency band of a first cell of a second base station;

~~report a physical cell identifier (PCI) for the first cell to a first base~~
~~station based at least in part on the received first SSB;~~

~~receive, from the first base station in response to the reported PCI, an~~
~~instruction to report a global cell identifier (CGI) for the second base station; and~~

~~transmit the CGI to the first base station based at least in part on the~~
~~received instruction and whether the radio frequency band of the first SSB was~~
~~received in a synchronization raster.~~

33.—An apparatus for wireless communication at a first base station,
comprising:

~~a processor;~~

~~memory in electronic communication with the processor; and~~

~~instructions stored in the memory and executable by the processor to cause the~~
~~apparatus to:~~

~~receive, from a user equipment (UE), a physical cell identifier (PCI)~~
~~for a first cell of a second base station;~~

~~identify whether a radio frequency band of a first synchronization~~
~~signal block (SSB) used to identify the PCI was received in a synchronization raster;~~
~~and~~

~~determine whether to instruct the UE to report a global cell identifier~~
~~(CGI) for the second base station based at least in part on the identification.~~

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

~~means for receiving a first synchronization signal block (SSB) in a radio~~
~~frequency band of a first cell of a second base station;~~

~~means for reporting a physical cell identifier (~~₁~~)~~₁ PCI₁ for the first cell to a first
base station based at least in part on the received first SSB;

means for receiving, from the first base station (105-a) in response to the reported PCI, an instruction to report a global cell identifier- $\{_1 \text{ CGI} \}_2$ for the second base station; and

means for transmitting the CGI to the first base station based at least in part on the received instruction and whether the radio frequency band of the first SSB was received in a synchronization raster.

3519. An apparatus for wireless communication at a first base station, comprising:

means for receiving, from a user equipment- $\{_1 \text{ UE} \}_2$, (115) a physical cell identifier- $\{_1 \text{ PCI} \}_2$ for a first cell of a second base station;

means for identifying whether a radio frequency band of a first synchronization signal block- $\{_1 \text{ SSB} \}_2$ used to identify the PCI was received in a synchronization raster; and

means for determining whether to instruct the UE to report a global cell identifier- $\{_1 \text{ CGI} \}_2$ for the second base station based at least in part on the identification.

~~36.—A non-transitory computer-readable medium storing code for wireless communication at a user equipment (UE), the code comprising instructions executable by a processor to:~~

~~receive a first synchronization signal block (SSB) in a radio frequency band of a first cell of a second base station;~~

~~report a physical cell identifier (PCI) for the first cell to a first base station based at least in part on the received first SSB;~~

~~receive, from the first base station in response to the reported PCI, an instruction to report a global cell identifier (CGI) for the second base station; and~~

~~transmit the CGI to the first base station based at least in part on the received instruction and whether the radio frequency band of the first SSB was received in a synchronization raster.~~

~~37.—A non-transitory computer-readable medium storing code for wireless communication at a first base station, the code comprising instructions executable by a processor to:~~

~~receive, from a user equipment (UE), a physical cell identifier (PCI) for a first cell of a second base station;~~

~~identify whether a radio frequency band of a first synchronization signal block (SSB) used to identify the PCI was received in a synchronization raster; and~~

~~determine whether to instruct the UE to report a global cell identifier (CGI) for the second base station based at least in part on the identification.~~