

CLAIMS

What is claimed is:

1. A locating method in a multi-connectivity network, comprising:
 - determining, by a terminal device, a position of the terminal device using a first radio
 - 5 access technology (RAT); and
 - sending, by the terminal device, a locating message of the terminal device to a location management function entity over an air interface through signaling of a second RAT,
 - wherein the locating message of the terminal device comprises:
 - a first locating parameter of each cell of at least one cell ~~a cell~~ of a first node, the first
 - 10 node corresponding to the first RAT; and
 - a second locating parameter of each cell of at least one cell ~~a cell~~ of a second node, the
 - second node corresponding to the second RAT.
2. The locating method according to claim 1, wherein the first node is a secondary node providing a service for the terminal device in the multi-connectivity network.
- 15 3. The locating method according to claim 1 or 2, wherein the second node is a primary node providing a service to the terminal device in the multi-connectivity network.
4. The locating method according to claim 3, wherein the sending, by the terminal device, a locating message of the terminal device to a location management function entity over an air interface through signaling of a second RAT comprises:
 - 20 sending, by the terminal device, the locating message of the terminal device to the location management function entity through a radio resource control (RRC) layer of the primary node.
5. The locating method according to any one of claims 1 to 4, wherein the locating message of the terminal device comprises at least one of the following parameters: uplink
- 25 and downlink time differences of arrival (TDoA), or a cell identifier (ID).
6. The locating method according to any one of claims 1 to 5, wherein the first RAT is

Long Term Evolution (LTE), and the second RAT is New Radio (NR).

~~7. The locating method according to any one of claims 1 to 6, wherein the locating message comprises a plurality of locating parameters of a plurality of cells of the first node.~~

~~87.~~ A locating method in a multi-connectivity network, comprising:

5 receiving, by a location management function entity, a locating message of a terminal device sent by the terminal device over an air interface through signaling of a second radio access technology (RAT); and

locating, by the location management function entity, the terminal device according to the locating message of the terminal device,

10 wherein the locating message comprises:

a first locating parameter of ~~each cell of at least one cell~~ ~~a cell~~ of a first node, the first node corresponding to a first RAT; and

a second locating parameter of ~~each cell of at least one cell~~ ~~a cell~~ of a second node, the second node corresponding to the second RAT,

15 wherein the terminal device is located through the first RAT.

~~98.~~ The locating method according to claim ~~87~~, wherein the first node is a secondary node providing a service for the terminal device in the multi-connectivity network.

~~109.~~ The locating method according to claim ~~87~~ or ~~98~~, wherein the second node is a primary node providing a service for the terminal device in the multi-connectivity network.

20 ~~1110.~~ The locating method according to any one of claims ~~87~~ to ~~109~~, wherein the locating message of the terminal device comprises a plurality of locating parameters of a plurality of cells of the first node, and the method further comprises:

selecting, by the location management function entity, a target cell from the plurality of cells; and

25 the locating, by the location management function entity, the terminal device according to the locating message of the terminal device comprises:

locating, by the location management function entity, the terminal device according to a locating parameter of the target cell.

5 ~~12~~11. The locating method according to any one of claims ~~8-7~~ to ~~11~~10, wherein the locating message of the terminal device comprises at least one of the following parameters:
uplink and downlink time differences of arrival (TDoA), or a cell identifier (ID).

~~13.—The locating method according to any one of claims 8 to 12, wherein the locating message comprises a plurality of locating parameters of a plurality of cells of the first node.~~

~~14~~12. A terminal device, configured to perform the method according to any one of claims 1 to ~~7~~6.

10 ~~15~~13. A location management function entity, configured to perform the method according to any one of claims ~~8-7~~ to ~~13~~11.