time and a pressure associated with the touch or swipe action. In some embodiments, the multimedia component 308 includes a front-facing camera and/or a rear-facing camera. When the device 300 is in an operating mode, such as a shooting mode or a video mode, the front-facing camera and/or the rear-facing camera can receive external multimedia data. Each of the front-facing camera and the rear-facing camera may be a fixed optical lens system or has focal length and optical zoom capability.

[00152] The audio component 310 is configured to output and/or input audio signals. For example, the audio component 310 includes a microphone (MIC) configured to receive an external audio signal when the device 300 is in an operation mode, such as a call mode, a recording mode, and a voice recognition mode. The received audio signal may be further stored in the memory 304 or transmitted via the communication component 316. In some embodiments, the audio component 310 further includes a speaker to output audio signals.

[00153] The I/O interface 312 provides an interface between the processing component 302 and peripheral interface modules, such as a keyboard, a click wheel, buttons, and the like. The buttons may include, but are not limited to, a home button, a volume button, a starting button, and a locking button.

[00154] The sensor component 314 includes one or more sensors to provide status assessments of various aspects of the device 300. For instance, the sensor component 314 may detect an open/closed status of the device 300, relative positioning of components, e.g., the display and the keypad, of the device 300, a change in position of the device 300 or a component of the device 300, a presence or absence of a user contact with the device 300, an orientation or an acceleration/deceleration of the device 300, and a change in temperature of the device 300. The sensor component 314 may include a proximity sensor configured to detect the presence of nearby objects without any physical contact. The sensor component 314 may also include a light sensor, such as a Complementary Metal Oxide Semiconductor (CMOS) or Charge-Coupled Device (CCD) image sensor, for using in imaging applications. In some embodiments, the sensor component 314 may also include an accelerometer sensor, a gyroscope sensor, a magnetic sensor, a pressure sensor, or a temperature sensor.

[00155] The communication component 316 is configured to facilitate communication, wired or wirelessly, between the device 300 and other devices. The device 300 can access a wireless network based on a communication standard, such as Wi-Fi, 2G, 3G, 4G, or 5G, or a combination

thereof. In an embodiment, the communication component 316 receives a broadcast signal from an external broadcast management system or broadcast associated information via a broadcast channel. In an embodiment, the communication component 316 further includes a Near Field Communication (NFC) module to facilitate short-range communication. For example, the NFC module may be implemented based on a RF Identification (RFID) technology, an Infrared Data Association (IrDA) technology, an Ultra-Wide Band (UWB) technology, a Blue Tooth (BT) technology, and other technologies.

[00156] In the embodiments, the device 300 may be implemented by one or more Application Specific Integrated Circuits (ASICs), Digital Signal Processors (DSPs), Digital Signal Processing Devices (DSPDs), Programmable Logic Devices (PLDs), Field Programmable Gate Arrays (FPGAs), controllers, micro-controllers, microprocessors or other electronic components, for performing the above described methods.

[00157] In the embodiments, there is also provided a non-transitory computer readable storage medium including instructions, such as the memory 304, executable by the processor 320 in the device 300, for performing the above methods. For example, the non-transitory computer-readable storage medium may be a ROM, a Random Access Memory (RAM), a CD-ROM, a magnetic tape, a floppy disc, and an optical data storage device.

[00158] FIG. 7 is a block diagram of a positioning device 400 illustrated according to an exemplary embodiment. For example, the device 400 may be provided as a core network device. As illustrated in FIG. 7, the device 400 includes a processing component 422 consisting of one or more processors, and memory resources represented by a memory 432 for storing instructions that may be executed by the processing component 422, such as applications. The applications stored in the memory 432 may include one or more modules each corresponding to a set of instructions. In addition, the processing component 422 is configured to execute the instructions to perform the above methods.

[00159] The device 400 may also include a power component 426 configured to perform power management of the device 400, a wired or wireless network interface 450 configured to connect the device 400 to a network, and an I/O interface 458. The device 400 may operate based on an operating system stored in the memory 432, such as Windows Server™, Mac OS X™, Unix™, Linux™, FreeBSD™, or the like.

[00160] In the embodiments, the device 400 may be implemented by one or more ASICs,

WHAT IS CLAIMED IS:

1. A positioning method, performed by a positioning measurement device, comprising:

reporting a positioning measurement report, wherein the positioning measurement report comprises at least one of a carrier phase measurement result or direct path indication information.

2. The method of claim 1, wherein the carrier phase measurement result comprises at least one of a carrier phase fractional part or a number of carrier phase whole cycles.

3. The method of claim 2, wherein the carrier phase fractional part comprises a plurality of carrier phase fractional parts corresponding to a plurality of paths respectively, or a carrier phase fractional part corresponding to the plurality of paths as a whole.

4. The method of claim 2, wherein the number of carrier phase whole cycles comprises a plurality of numbers of carrier phase whole cycles corresponding to a plurality of paths respectively, or a number of carrier phase whole cycles o corresponding to the plurality of as a whole.

5. The method of any of claims 1 to 4, wherein the direct path indication information comprises a first bit for indicating whether a specified path is a direct path, or a second bit for indicating a probability that a specified path is a direct path.

6. The method of claim 5, wherein each piece of direct path indication information corresponds to at least one of:

a single reference signal, a single transmission reception point, or a single carrier phase measurement result.

7. The method of any of claims 1 to 6, wherein the positioning measurement report further comprises at least one piece of following information:

a reference signal received power, an angle of arrival, an angle of departure, time of arrival, a difference value of time of arrival, a round-trip time value, indication information on whether a reception (Rx) time error is identical, indication information on whether a transmission (Tx) time error is identical, or indication information on whether a Tx and Rx time error is identical.

8. The method of any of claims 1 to 7, wherein reporting the positioning measurement report comprises:

reporting the positioning measurement report to a core network device.

9. The method of any of claims 1 to 8, wherein the positioning measurement report is obtained by measurement on a plurality of paths based on a positioning reference signal, and the positioning reference signal comprises:

a downlink positioning reference signal, or an uplink positioning reference signal.

10. A positioning method, performed by a core network device, comprising:

receiving a positioning measurement report, wherein the positioning measurement report comprises at least one of a carrier phase measurement result or direct path indication information.

11. The method of claim 10, wherein the carrier phase measurement result comprises at least one of a carrier phase fractional part or a number of carrier phase whole cycles.

12. The method of claim 11, wherein the carrier phase fractional part comprises a plurality of carrier phase fractional parts corresponding to a plurality of paths respectively, or a carrier phase fractional part corresponding to the plurality of paths as a whole.

13. The method of claim 11, wherein the number of carrier phase whole cycles comprises a plurality of numbers of carrier phase whole cycles corresponding to a plurality of paths respectively, or a number of carrier phase whole cycles corresponding to the plurality of paths as a whole.

14. The method of any of claims 10 to 13, wherein the direct path indication information comprises a first bit for indicating whether a specified path is a direct path, or a second bit for indicating a probability that a specified path is a direct path.

15. The method of claim 14, wherein each piece of direct path indication information corresponds to at least one of:

a single reference signal, a single transmission reception point, or a single carrier phase measurement result.

16. The method of any of claims 10 to 15, wherein the positioning measurement report further comprises at least one piece of following information:

a reference signal received power, an angle of arrival, an angle of departure, time of arrival, a difference value of time of arrival, a round-trip time value, indication information on whether a reception (Rx) time error is identical, indication information on whether a

transmission (Tx) time error is identical, or indication information on whether a Tx and Rx time error is identical.

17. The method of any of claims 10 to 16, wherein the positioning measurement report is obtained by measurement on a plurality of paths based on a positioning reference signal, and the positioning reference signal comprises:

a downlink positioning reference signal, or an uplink positioning reference signal.

18. A positioning device, comprising:

a processor; and

a memory for storing instructions executable by the processor; wherein

the processor is configured to: perform the method of any one of claims 1-9.

19. A positioning device, comprising:

a processor; and

a memory for storing instructions executable by the processor; wherein

the processor is configured to: perform the method of any one of claims 10-17.

20. A non-transitory computer-readable storage medium having instructions stored thereon, wherein when the instructions are executed by a processor, the processor is caused to perform the method of any one of claims 1-9 or the method of any one of claims 10-17.