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Deenoo et al.

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(54) **DISTRIBUTED CONTROL IN WIRELESS SYSTEMS**

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(73) Assignee: **SONY CORPORATION**, Tokyo (JP)

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PCT Pub. Date: **Nov. 16, 2017**

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H04B 7/0408   (2017.01)
(Continued)

(52) **U.S. Cl.**
CPC **H04W 74/0841** (2013.01); **H04B 7/0408** (2013.01); **H04B 7/0617** (2013.01);
(Continued)

(58) **Field of Classification Search**
CPC ... H04B 7/0408; H04B 7/0617; H04L 5/0048; H04W 56/001; H04W 72/0453
See application file for complete search history.

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(57) **ABSTRACT**

Systems, procedures, and instrumentalities are disclosed for distributed control in wireless systems, such as 5G flexible radio access technology (RAT) (5gFLEX). Example procedures are provided for WTRU and network operation associated with a distributed control plane architecture, connectionless data transfer and dedicated system information acquisition. Distributed control may be provided, for example, by replicating a plurality of access control functions (ACFs) using a plurality of instances in a plurality of different transmission/reception points (TRPs) with multiconnectivity. The plurality of TRPs may concurrently provide control services to a WTRU. Centralized control functions may manage core network connectivity and/or a plurality of user plane instances for the WTRU and/or may

(Continued)
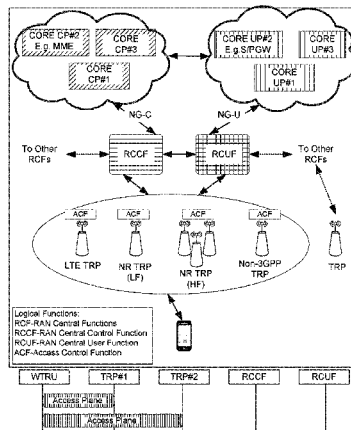
facilitate coordination between the plurality of ACF instances for the WTRU in the plurality of different TRPs of the WTRU's configuration.

15 Claims, 13 Drawing Sheets

Related U.S. Application Data

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H04W 76/27	(2018.01)
H04L 5/00	(2006.01)
H04W 8/22	(2009.01)
H04W 16/14	(2009.01)
H04W 56/00	(2009.01)
H04W 68/00	(2009.01)
H04W 72/04	(2009.01)
H04W 80/02	(2009.01)

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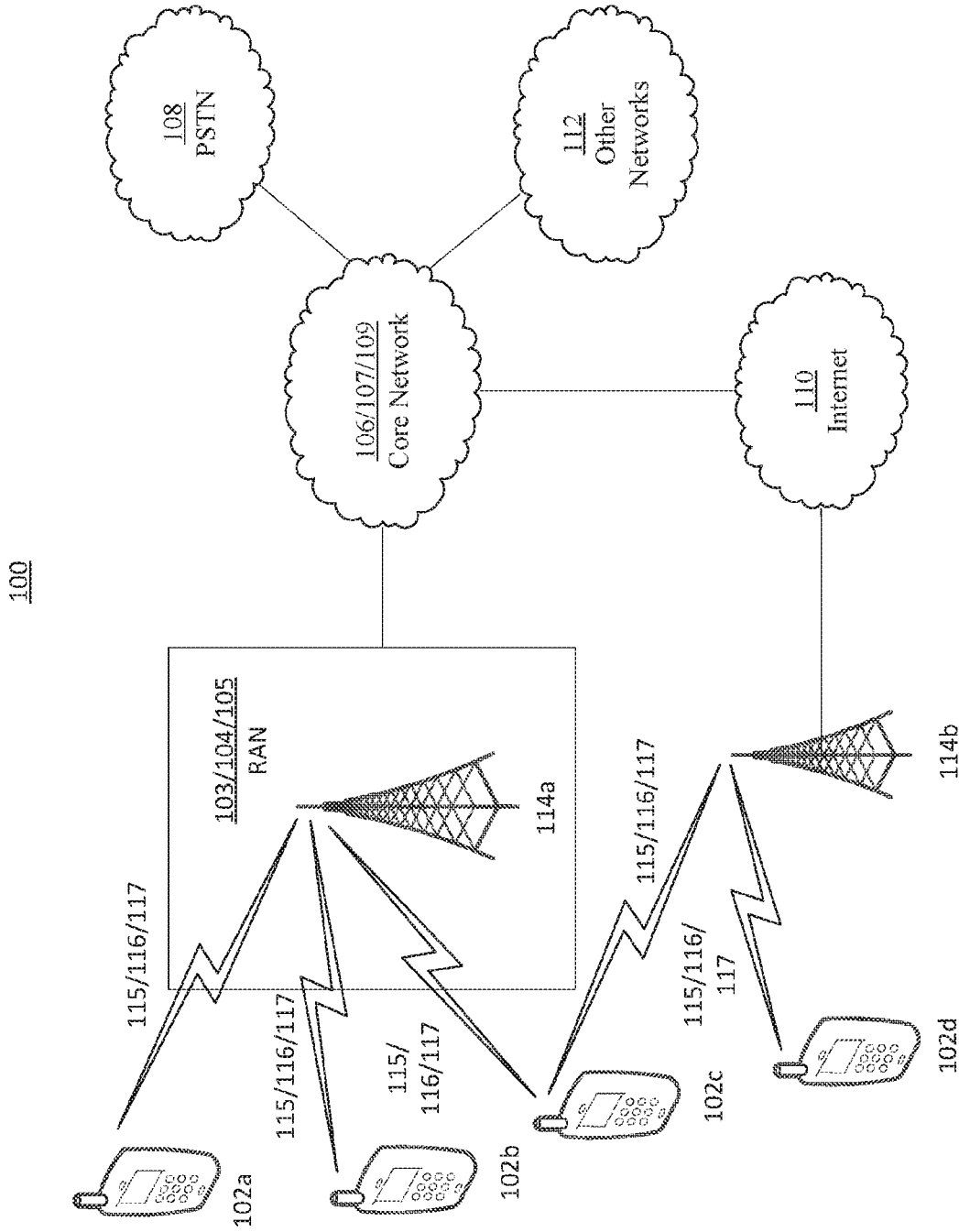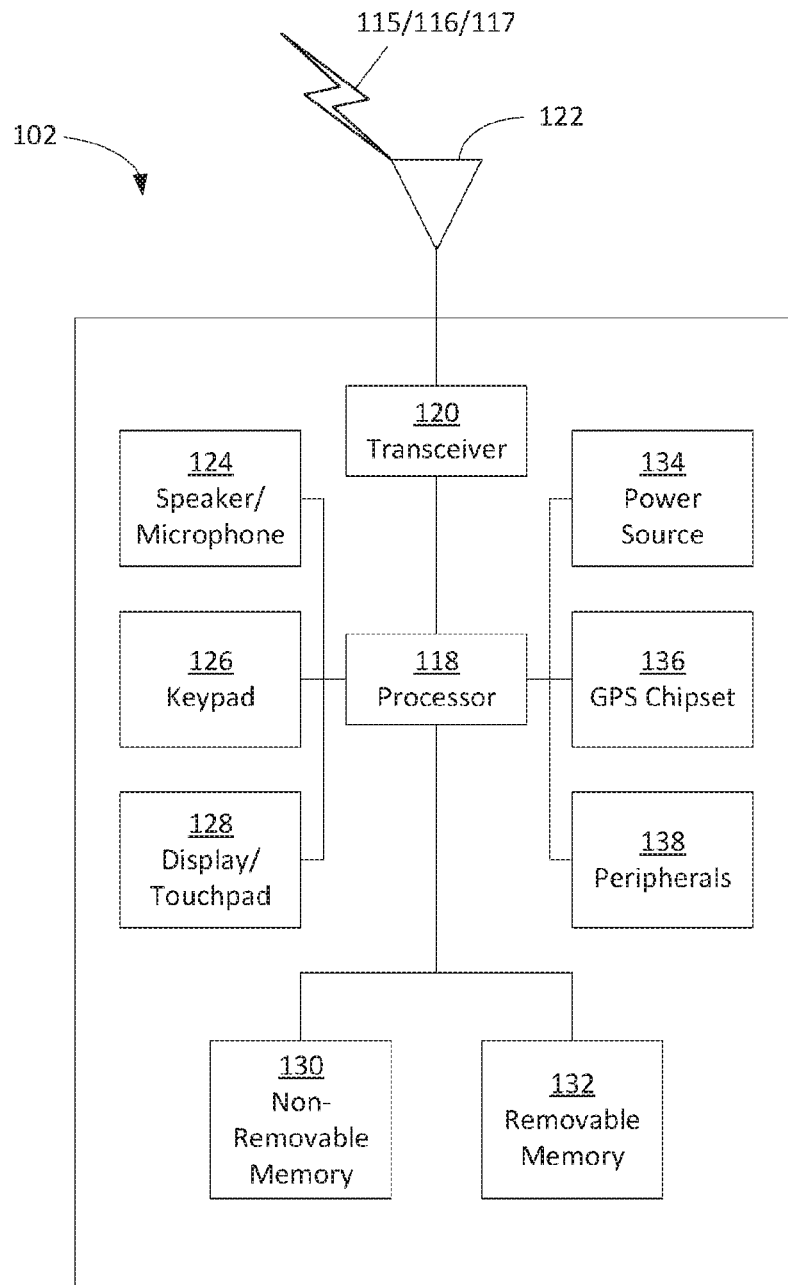
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100

108
PSTN

112
Other Networks

106/107/109
Core Network

110
Internet

103/104/105
RAN

114a

114b

115/116/117

115/116/117

115/116/117

115/116/117

115/116/117

115/116/117

102a

102b

102c

102d

FIG. 1A

115/116/117

102

122

120
Transceiver

124
Speaker/
Microphone

134
Power
Source

126
Keypad

118
Processor

136
GPS Chipset

128
Display/
Touchpad

138
Peripherals

130
Non-
Removable
Memory

132
Removable
Memory

FIG. 1B

FIG. 1C

DOCKET ALARM
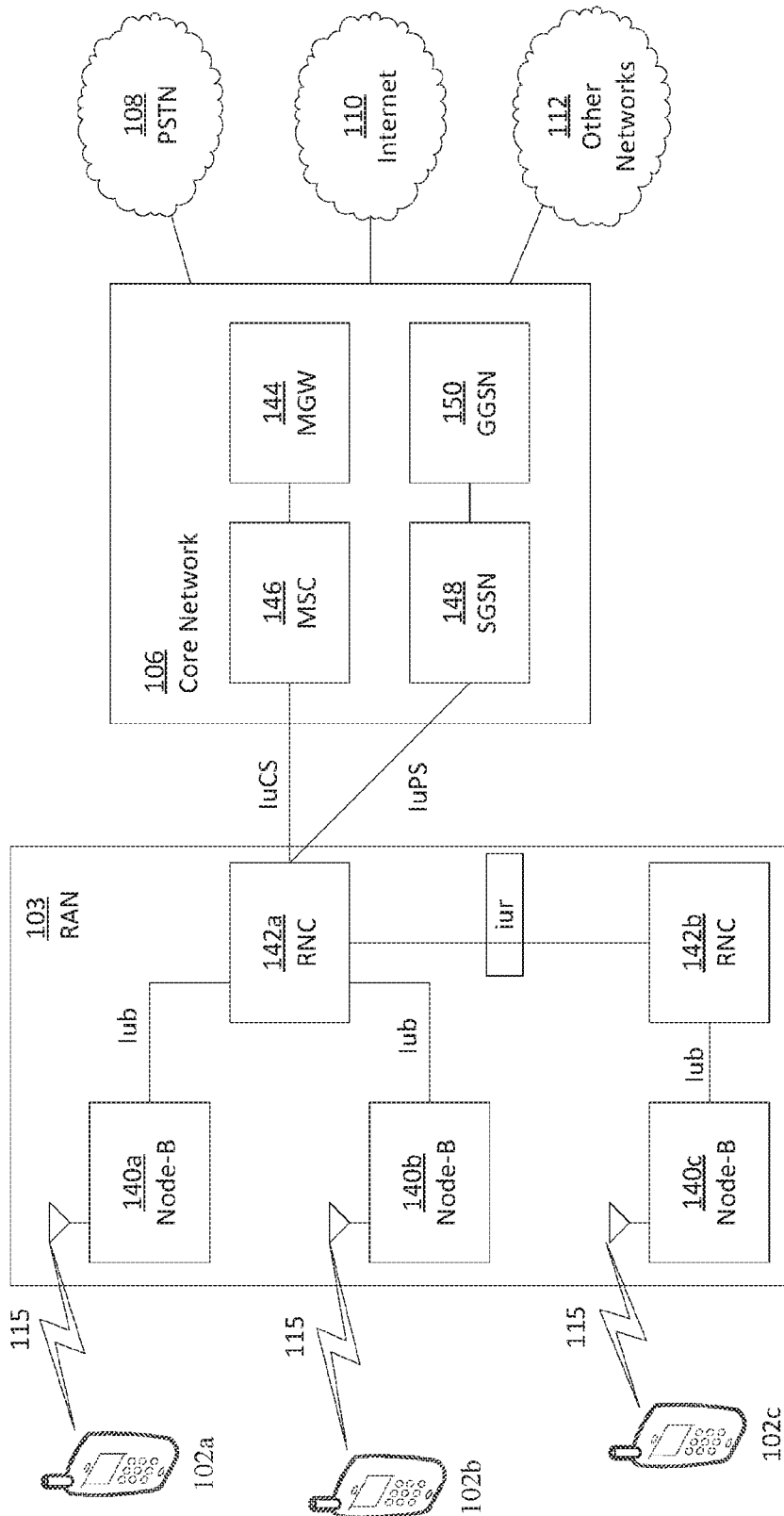
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