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(54) **CHANNEL ACCESS METHODS AND LISTEN-BEFORE-TALK SOLUTIONS FOR NEW RADIO OPERATION IN UNLICENSED BANDS**

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(57) **ABSTRACT**

Methods, systems, and devices for channel access and listen-before-talk approaches for new radio operation in unlicensed bands and/or licensed bands. A gNB and a wireless transmit/receive unit (WTRU) may operate in unlicensed spectrum. The gNB may perform listen-before-talk operation, and when successful, may send a downlink control channel with a slot format indication (SFI) to the WTRU. There may also be a handshaking procedure with an exchange of a request to transmit (RTT) and a request to receive (RTR). Prior to receiving the downlink channel, the WTRU may monitor search spaces at a first level, and once the downlink channel is received the WTRU may monitor search spaces at a second level. At the end of transmission, the WTRU may revert back to monitoring search spaces at the first level. In one example, the first level may be a mini-slot level and the second level may be a slot level.

