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(54) **USER EQUIPMENT (UE)-BASED SIDELINK-AWARE RADIO FREQUENCY FINGERPRINTING (RFFP) POSITIONING**

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(57) **ABSTRACT**

Disclosed are techniques for wireless positioning. In an aspect, a first user equipment (UE) obtains one or more first radio frequency fingerprint (RFFP) measurements of one or more first downlink channels received at the first UE, one or more first sidelink channels received at the first UE, or both, and determines one or more locations of a target UE based on the one or more first RFFP measurements and a machine learning module, wherein the machine learning module is trained based on previously collected RFFP measurements of one or more downlink channels, RFFP measurements of one or more uplink channels, RFFP measurements of one or more sidelink channels, locations of one or more sidelink anchor UEs, locations of one or more base stations, or any combination thereof.