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CUI et al.(10) **Pub. No.: US 2023/0232290 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **RACH CONFIGURATION IN L1/L2  
MOBILITY**(52) **U.S. Cl.**CPC ... **H04W 36/0077** (2013.01); **H04W 36/0016**  
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**ABSTRACT**(72) Inventors: **Jie CUI**, Cupertino, CA (US); **Dawei ZHANG**, Cupertino, CA (US); **Hong HE**, Cupertino, CA (US); **Huaning NIU**, Cupertino, CA (US); **Manasa RAGHAVAN**, Cupertino, CA (US); **Qiming LI**, Beijing (CN); **Xiang CHEN**, Cupertino, CA (US); **Yang TANG**, Cupertino, CA (US); **Haitong SUN**, Cupertino, CA (US); **Yushu ZHANG**, Beijing (CN)

Devices, systems, and methods for Random Access Channel (RACH) configuration in Layer 1 (L1)/Layer 2 (L2) mobility. A user equipment (UE) may obtain a downlink (DL) Transmission Configuration Indicator (TCI) list from a first Transmission and Reception Point (TRP). The DL TCI list may include DL beam information, RACH Occasion (RO) information, and initial Bandwidth Part (BWP) information associated with each DL TCI of a plurality of DL TCIs related to the first TRP and multiple TRPs adjacent to the first TRP. The UE may receive a handover command from the first TRP via Downlink Control Information (DCI) in L1 or Media Access Control (MAC) Control Element (CE) in L2. The handover command indicates a handover from the first TRP to a second TRP of the multiple TRPs for the UE, and includes a specified DL TCI related to the second TRP. The UE may determine RACH information related to the second TRP, based at least partly on the specified DL TCI related to the second TRP included in the handover command and the DL TCI list. The UE may then perform random access to the second TRP based on the RACH information related to the second TRP. The RACH information may include uplink (UL) beam information, RO information and Bandwidth Part (BWP) information for the UE to perform random access to the second TRP.

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