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(54) **REDUCED COMPLEXITY IN UPLINK  
RECEIVE BEAMFORMER CALCULATIONS**

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(57) **ABSTRACT**

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Methods, systems, and apparatuses for calculating and using uplink receive beamformers in wireless devices. In a demodulation reference signal (DMRS)-based beamformer calculation scheme, the computational complexity might be overwhelmingly high if a unique beamformer is calculated for each and every single resource element (RE). There may be combinations via frequency, time, or other means across resource block groups (RBGs) to consolidate the number of beamformers to be calculated.

