

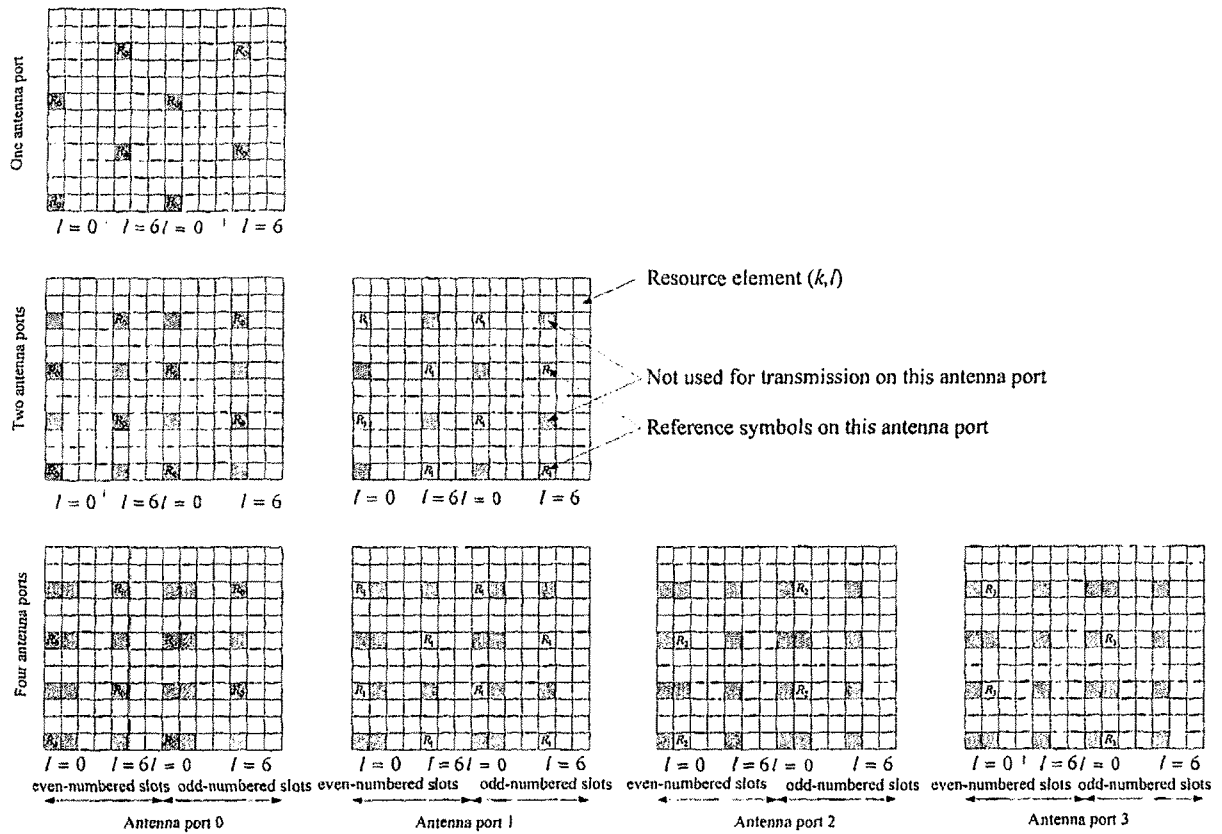


Figure 1 Up to 4 downlink cell-specific reference signals (normal CP) in prior art

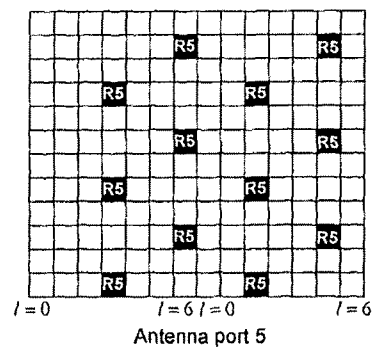


Figure 2 One downlink UE-specific reference signal (normal CP) in prior art

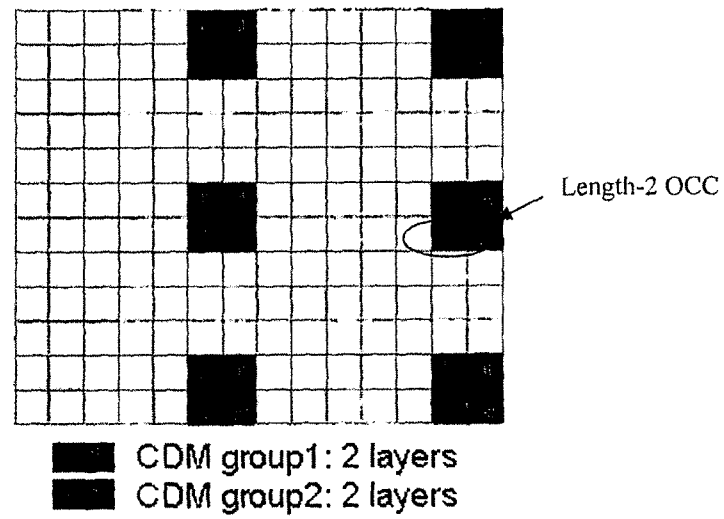


Figure 3 up to 4 layers DM-RS pattern for normal CP in prior art

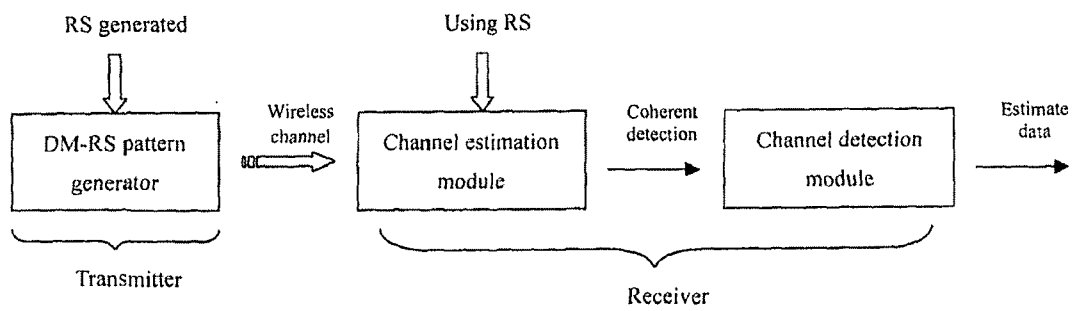


Figure 4 A wireless system with DM-RS pattern

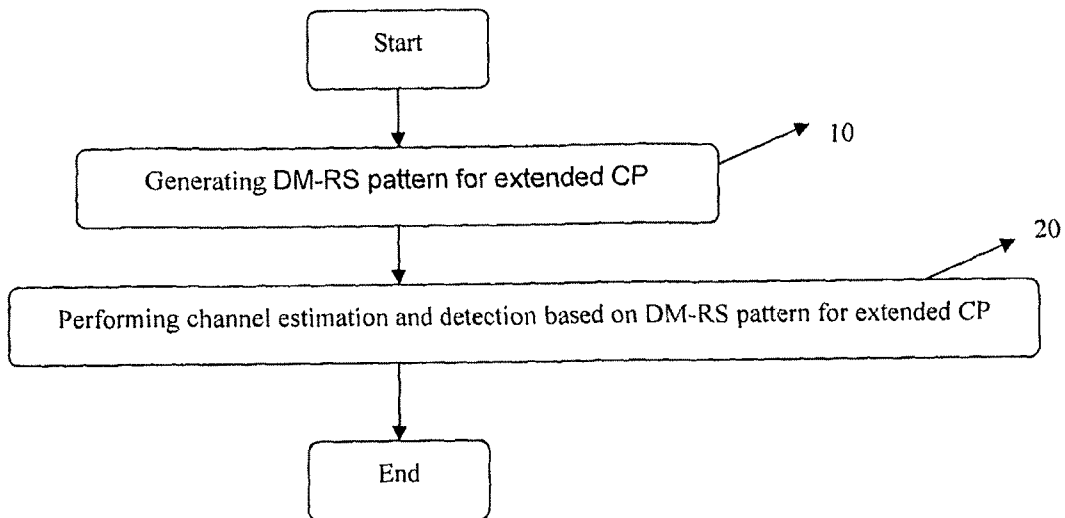


Figure 5 Channel estimation and detection method based on DM-RS pattern

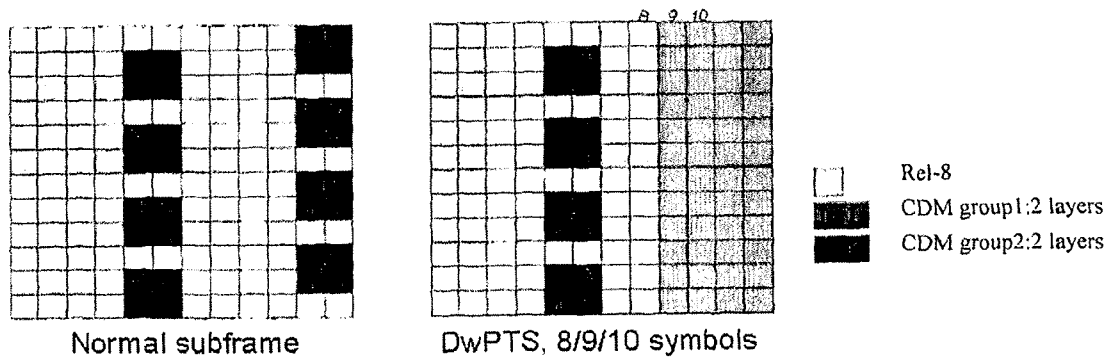


Figure 6 Extended CP Rank 1-4 pattern for both normal subframe (left) and DwPTS (right)

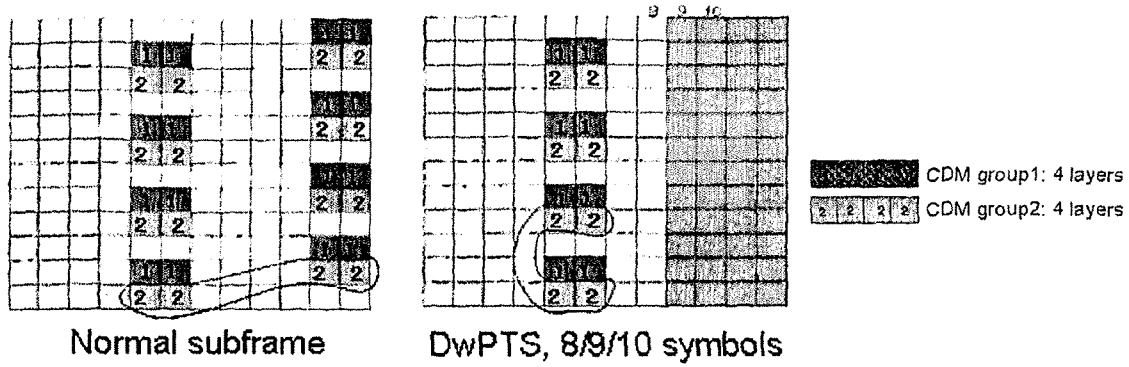


Figure 7 Extended CP rank 5-8 pattern: Option-1 with OCC=4

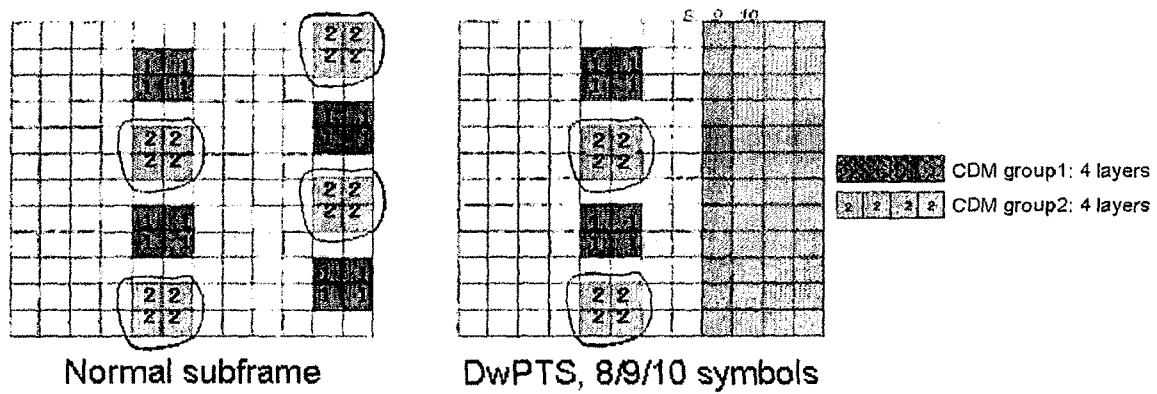


Figure 8 Extended CP rank 5-8 pattern: Option-2 with OCC=4

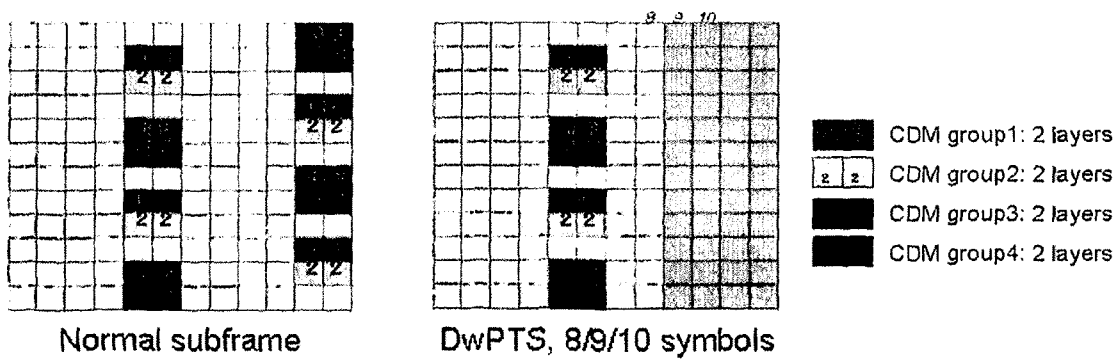


Figure 9 Extended CP rank 5-8 pattern: Option-3 with OCC=2