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(54) **METHOD FOR PDP ESTIMATION IN  
FREQUENCY DOMAIN**

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**ABSTRACT**

At least one embodiment relates to power delay profile (PDP) estimation e.g. in 5G systems for channel estimation and for demodulation. The power delay profile is estimated directly in the frequency domain using LMMSE properties based on the knowledge of channel statistics. An example embodiment applies an approximation by estimating the second order statistics of the channel autocorrelation function in time domain represented by the variance of the derivative of raw channel estimates in frequency domain.

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