



ABSTRACT
SPEED ESTIMATION

A system and method of speed estimation for a cellular radio network comprises a number of speed estimation units (14-20). Each unit comprises an averaging window (24) of a different duration, a buffer store (26) and variance calculator (28). The duration of each window is equivalent to the time taken by a mobile unit to traverse a distance of 20 wavelengths of the received signal at a particular speed. An incoming signal is applied to the units. The duration of the window determines the significance of the fast fade components in the signal which is related to mobile unit speed. When the average of a window is substantially constant, the speed corresponding to that window can be assumed to be achieved or exceeded. Decision logic (30) is arranged to poll the outputs of the variance calculators to derive a speed estimation indication.