

DEVICE AND METHOD FOR CORRECTING LOCAL OSCILLATION FREQUENCY
OF RADIO RECEPTION DEVICE ACCORDING TO PILOT SYNCHRONOUS
DETECTION

ABSTRACT

A pilot symbol detection section (1) detects and extracts pilots symbols from a despread signal. An inter-symbol phase shift detection section (2) detects phase shifts between adjacent pilot symbols in a pilot symbols block. An inter-pilot block phase shift detection section (3) detects phase shifts between adjacent pilot symbol blocks. An inter-symbol phase shift averaging section (4) averages the inter-symbol phase shifts. An inter-pilot block phase shifts averaging section (5) averages the inter-pilot block phase shifts. A frequency correction determination section (6) determines frequency correction based on outputs of the inter-symbols phase shifts averaging section (4) and the inter-pilot block phase shift averaging section (5). An output signal of the frequency correction determination section (6) is used for frequency correction of a local oscillation signal which is used for the detection (despreading) of a received radio signal. A large frequency difference can be corrected accurately and immediately regardless of whether it is at the beginning or in the middle of communication.

FIG 2