

DIGITAL BLOCK PROCESSOR FOR PROCESSING A PLURALITY OF
TRANSMISSION CHANNELS IN A WIRELESS RADIOTELEPHONY SYSTEM

Abstract

A digital block receiver system, in a cellular/wireless FM
5 radiotelephony system, receives and heterodyne a block of cellular/wireless receive
channels (from 201) to a very low block IF signal by analog processing (in 202).
This block IF signal is applied to a precision high speed A/D converter (205) and
converted to a digitized time series. A window function (in 207) is applied to the
digitized time series and a high speed FFT (in 209) is applied to frequency isolate
10 the individual channels. The active channels are digitally processed by a DSP (211)
to recover the FM channel modulation.

FIGURE 2.