

MULTIPLE QAM DIGITAL TELEVISION
SIGNAL ENCODER
ABSTRACT

In a high definition television signal encoder, high priority (5) and standard priority (11) digital data are each separated (16,18) into quadrature I and Q components, spectrally shaped by digital filtering (21,25), and time division multiplexed (32,34) to produce respective quadrature amplitude modulated signals of the 32-QAM type. The high priority QAM signal and the standard priority QAM signal exhibit different bandwidths and carrier frequencies. The high priority and standard priority QAM signals are combined (40) in digital form to produce a prioritized dual 32-QAM digital signal before being conveyed to a single digital-to-analog converter (50) and analog RF transmission networks (52-55) switch.

FIGURE 1

This Sheet Has Been Replaced

