Title (en)

A DATA TRANSMISSION PROCESS AND SYSTEM TO PERMIT SUBSTANTIAL REDUCTION OF INTERFERENCE BETWEEN A RECEIVED FIRST AND SECOND DIGITAL SIGNAL

Publication

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Application

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Priority

US 80315277 A 19770603

Abstract (en)

[origin: US4178550A] The present invention relates to method and apparatus for substantially reducing the effects of interference at a receiver between concurrently received first and second digital signals which use the same frequency spectrum. Interference between signals is effectively reduced by transmitting the first digital signal in an uncoded form while concurrently transmitting the second digital signal with both reduced capacity when compared with the first signal and in coded form using a forward error correcting code such as, for example, a block or convolutional code. At the receiver intercepting both digital signals, a suitable detection process is performed to decode the second signal and separate both signals. The present invention is applicable to the simultaneous satellite transmission of an area coverage beam and a plurality of spot coverage beams or to increase capacity on a radio channel.

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