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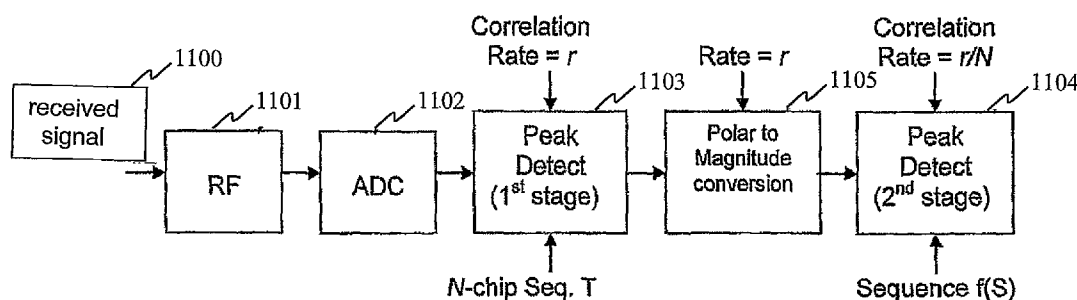
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(54) Title: METHOD AND SYSTEM FOR DETECTING A FIRST SYMBOL SEQUENCE IN A DATA SIGNAL, METHOD AND SYSTEM FOR GENERATING A SUB-SEQUENCE OF A TRANSMISSION SYMBOL SEQUENCE, AND COMPUTER PROGRAM PRODUCTS



(57) Abstract: A method for detecting a first symbol sequence in a data signal is described comprising receiving the data signal in which the first symbol sequence should be detected, wherein the first symbol sequence is expressible as the kronecker product of a second symbol sequence and a third symbol sequence; correlating the first symbol sequence with the third symbol sequence to generate a first correlation result; generating a second correlation result by correlating a fourth symbol sequence derived from the first correlation result with a fifth symbol sequence derived from the second symbol sequence by a transformation that maps all negative symbols of the second symbol sequence to non-negative symbols; and generating a detection result based on the second correlation result.