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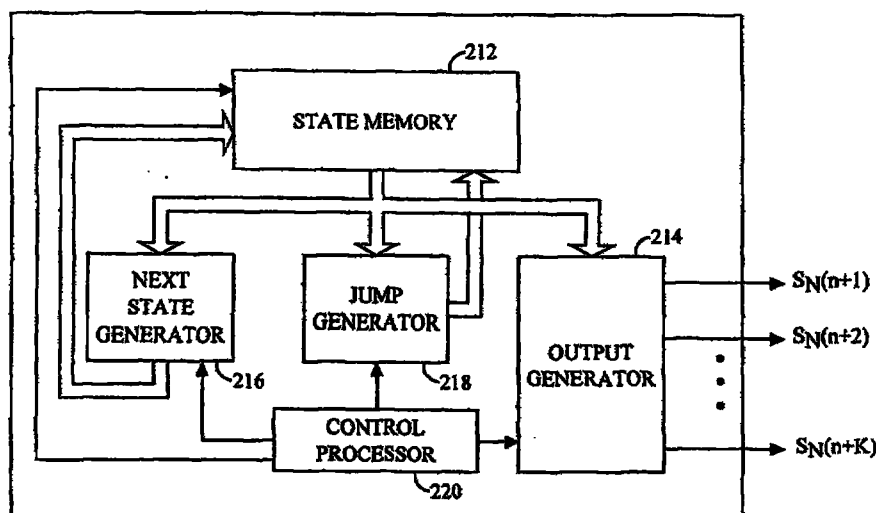
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- (71) Applicant: **QUALCOMM INCORPORATED [US/US];**
5775 Morehouse Drive, San Diego, CA 92121-1714 (US).
- (72) Inventors: **LUPIN, Edward, D.; 7745 Salix Place, San Diego, CA 92129 (US). SINDHUSHAYANA, Nagabhushana, T.; 10615 Dabney Drive, No. 19, San Diego, CA 92126 (US).**
- (74) Agents: **OGROD, Gregory, D. et al.; Qualcomm Incorporated, 5775 Morehouse Drive, San Diego, CA 92121-1714 (US).**
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(54) Title: **A METHOD AND APPARATUS FOR GENERATING MULTIPLE BITS OF A PSEUDONOISE SEQUENCE WITH EACH CLOCK PULSE BY COMPUTING THE BITS IN PARALLEL**



(57) Abstract: A novel method and apparatus for generating PN sequences with an arbitrary number of bits, where the number of bits is provided in parallel with each clock pulse is described. This allows the sequences to be generated at high speed when needed, and allows parallel processing in the acquisition and demodulation processes. In the invention, the initial values of states are loaded into registers of a parallel PN generator, which immediately generates the next n bits of the PN sequence, where n is an arbitrary number dependent on performance required. Then, a first sub-part of the PN generator (406) of the present invention receives the present state of the PN generator (406) and outputs the state of the PN generator (406) n bits in the future.