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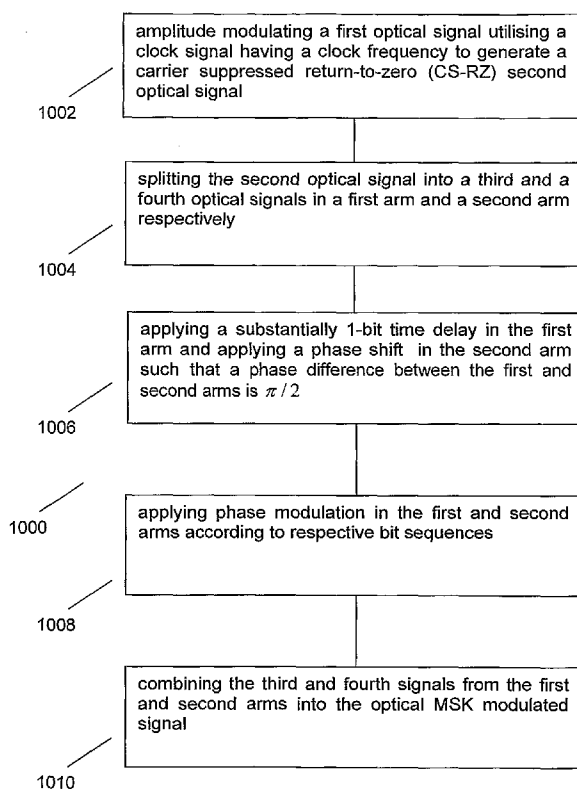
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(54) Title: OPTICAL MSK DATA FORMAT



(57) Abstract: A method of generating an optical minimum shift keying (MSK) modulated signal, a method of pre-coding an input data stream for generation of an optical MSK modulated signal, a method of decoding an optical MSK modulated signal, an MSK transmitter, an encoder structure for encoding an input data stream for generation of an optical MSK modulated signal, and a receiver structure for decoding an optical MSK modulated signal. The method of generating an optical minimum shift keying (MSK) modulated signal comprises amplitude modulating a first optical signal utilising a clock signal having a clock frequency to generate a carrier suppressed return-to-zero (CS-RZ) second optical signal; splitting the second optical signal into a third and a fourth optical signals in a first arm and a second arm respectively; applying a substantially 1-bit time delay in the first arm and applying a phase shift in the second arm such that a phase difference between the first and second arms is $\pi/2$; applying phase modulation in the first and second arms according to respective bit sequences; and combining the third and fourth signals from the first and second arms into the optical MSK modulated signal.

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