

Title (en)

METHOD FOR REMOTE CONTROL WITH A DIRECT VIEW OF A MACHINE ON THE YARD AND TRANSMITTER-RECEIVER ARRANGEMENT ADAPTED FOR CARRYING IT OUT

Publication

EP 0141749 B1 19890308 (FR)

Application

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Priority

FR 8317557 A 19831104

Abstract (en)

1. A direct view remote control method for a construction machine, especially for mines and quarries, adapted to transmit to this machine a plurality of orders to be executed simultaneously, according to which parallel orders from a driver of the machine are converted (LS) into binary signals, a sequential binary signal (A, B-C: Sp -Ss) is elaborated (CB) from these wherein each sequence includes synchronization bits (A) and information bits (B-C) representative, in biphasic code with a transition per bit, of the afore mentioned binary signals, a remote control signal transmitted in electromagnetic form (ERF) is elaborated (M) by direct amplitude modulation of a carrier wave by this sequential binary signal, from this remote control signal, after reception, the sequential binary signal is restored and converted after synchronization into electrical signals appropriate for control of the machine, the method being characterized in that the sequential binary signal comprises a periodic pulsed signal (A) in its synchronization bits, the frequency of which (H0) is an even multiple of the transitory frequencies (H1 , H2) defined by the transitions in the successive information bits, and in that on reception the bit and sequence frequencies are restored (RSYN, RM1) from the recognition (RSYN), in the demodulated signal, of the synchronization frequency (H0), whilst this demodulated signal is subjected (AD; VM, DS) to validation tests, with the help of the frequencies thus restored, before its decoding and conversion into electrical control signal is authorized.

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