

Title (en)
COMMUNICATION SYSTEM FOR MOBILE NETWORKS

Title (de)
KOMMUNIKATIONSSYSTEM FÜR MOBILE NETZE

Title (fr)
SYSTEME DE COMMUNICATION POUR RESEAUX MOBILES

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Application
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Abstract (en)
[origin: WO0052851A1] The present invention provides a communication system for mobile networks. At the highest level of organization, the system, termed a Communication System for Mobile Networks (CSMN), comprises four components: 1) one or more fixed networks; 2) one or more mobile networks; 3) wireless inter-connecting means; and 4) open standards-based protocol means throughout the system. One generalized embodiment of the CSMN system, termed a Mobile Network Vehicle System (MNVS) comprises: 1) one or more surface-level networks; 2) one or more on-board vehicle networks; 3) radio frequency data links; and 4) open standards-based protocol means throughout the system. One specific embodiment of the MNVS, termed a Communications Based Train Control (CBTC) system comprises: 1) one or more wayside networks; 2) one or more carborne networks; 3) radio-frequency data links; and 4) a standard internet protocol means throughout the system. In a preferred embodiment of the CBTC system, the transceivers employ 2.4 GHz Hybrid Spread Spectrum radio transceivers which employ both Slow Frequency Hopping and Direct Sequence Spreading Techniques, in addition to a half-duplex Time Division Multiple Access scheme which allows one wayside spread spectrum transceiver to communicate with many carborne spread spectrum transceivers at one time.

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