

Title (en)

METHOD AND CIRCUIT ARRANGEMENT FOR TRANSMITTING DATA TO POWER LINES

Title (de)

VERFAHREN UND SCHALTUNGSANORDNUNG ZUR DATENÜBERTRAGUNG AUF POWERLINES

Title (fr)

PROCEDE ET CIRCUIT POUR LA TRANSMISSION DE DONNEES SUR DES LIGNES DE TRANSPORT D'ENERGIE

Publication

EP 1119924 A1 20010801 (DE)

Application

EP 99941630 A 19990817

Priority

- DE 19846155 A 19981007
- EP 9906008 W 19990817

Abstract (en)

[origin: WO0021212A1] The invention relates to a method and a circuit arrangement for transmitting data to power lines or other not physically separable lines (18) by means of a repeater chain (10). According to said method, data transmission proceeds in a channel-oriented manner and the data is allocated to the channels using an access routine. The data is transmitted by a transmission method between the repeaters (11-17) in duplex operation mode. The transmission method is organized as a three-phase TDD wherein the total of available channels is subdivided into two groups of channels (1, 2). The repeaters (11-17) connected to the line (18) are subdivided by a modulo 3 division into three groups according to their order on the line (18). The inventive method comprises the following steps: a) transmitting the first group (11, 14, 17) in the first TDD phase to the repeaters (12; 13, 15; 16) which are adjacent in an up and down direction; b) transmitting the second group (13, 16) in the second TDD phase to the repeaters (12, 14; 15, 17) which are adjacent in an up and down direction; c) transmitting the third group (12, 15) in the third TDD phase to the repeaters (11, 13; 14, 16) which are adjacent in an up and down direction. The channel groups (1, 2) are permanently allocated to a certain transmission direction for each TDD phase and for all repeaters (11-17).

IPC 1-7

H04B 3/58

IPC 8 full level

H04B 3/58 (2006.01)

CPC (source: EP)

H04B 3/58 (2013.01)

Citation (search report)

See references of WO 0021212A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 0021212 A1 20000413; AU 5517199 A 20000426; DE 19849111 C1 20010517; EP 1119924 A1 20010801

DOCDB simple family (application)

EP 9906008 W 19990817; AU 5517199 A 19990817; DE 19849111 A 19981024; EP 99941630 A 19990817