

Title (en)
HYBRID CIRCUIT

Title (de)
GABELSCHALTUNG

Title (fr)
CIRCUIT HYBRIDE

Publication
EP 0927471 A1 19990707 (DE)

Application
EP 98902928 A 19980226

Priority
• CH 9800077 W 19980226
• CH 71497 A 19970325
• CH 75697 A 19970402

Abstract (en)
[origin: WO9843385A1] The present invention concerns a hybrid circuit which serves to connect a transmitting unit (TX) and a receiving unit (RX) to a double-conductor transmission line and has a bridge connection with four bridge branches each with two resistors (R1t, R2t: R1r, R2r; R3r, Rqr; R3t, Rqt) which are so designed and so connect the two outputs (txa1, txa2) of the transmitting unit (TX) and the two inputs (rxel, rxel2) of the receiving unit (RX), that the components of the transmission signal which arise at the input of the receiving unit (RX) cancel each other out; the transmission line is connected under optional cut-in of a transmitter (TF) via the first resistors (Rqt and Rqr) of the third and fourth bridge branches (R3r, Rqr; R3t, Rqt) with the transmitting unit (TX) and via the second resistors (R3t and R3r) of the third and fourth bridge branches (R3r, Rqr; R3t, Rqt) with the receiving unit (RX). According to the invention, the resistors (R1t, R2t, R3r, Rqr and R1r, R2r, R3t, respectively) of the four bridge branches are selected so that impedance (Zb) provided to compensate impedance (Zl) of the transmission line takes on a value high enough that the error tolerance provided for the hybrid circuit can be adhered to, even without building in this impedance (Zb). Preferably, the hybrid circuit is connected to the input of the receiving unit (RX) via a filter (FR) which serves to equalize the dynamic range (dyn1, dyn2) of the signals which are transmitted over cables of differing diameters.

IPC 1-7
H04L 5/14; **H04B 1/58**

IPC 8 full level
H04B 1/58 (2006.01); **H04L 5/14** (2006.01)

CPC (source: EP)
H04B 1/58 (2013.01); **H04B 3/03** (2013.01); **H04L 5/1423** (2013.01); **H04B 1/581** (2013.01); **H04B 1/583** (2013.01)

Citation (search report)
See references of WO 9843385A1

Designated contracting state (EPC)
AT BE CH DE DK ES FI FR GB GR IE IT LI NL PT SE

DOCDB simple family (publication)
WO 9843385 A1 19981001; AU 5979898 A 19981020; AU 730313 B2 20010301; EP 0927471 A1 19990707; NO 985487 D0 19981124; NO 985487 L 19990125

DOCDB simple family (application)
CH 9800077 W 19980226; AU 5979898 A 19980226; EP 98902928 A 19980226; NO 985487 A 19981124